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Registered Apprentices: The Cohort of 1993, a Decade Later, Comparisons with the 1992 Cohort

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Denis Morissette

Statistics Canada

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Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Acronyms

RAIS Registered Apprenticeship Information System

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Executive summary

This study examines the completion and discontinuation rates trends in apprenticeship programs for the 1993 cohort of newly registered apprentices over an 11-year period. This follows a study released in 2005 by Statistics Canada that looked at the same issues for the 1992 cohort of newly registered apprentices.

The purpose of this study is to provide measures of completion of apprenticeship programs and information on the learning paths of the apprentices. The study compares the measures for the 1993 and the 1992 cohorts.

The study uses longitudinal data created from the Registered Apprenticeship Information System (RAIS). It covers three jurisdictions that could provide data at the individual level over the 11-year period: New Brunswick, Ontario and Alberta.

Overall, the study shows similar results for the two cohorts in all three provinces. The completion rate over an 11-year period was about 50% in New Brunswick and in Ontario and close to 60% in Alberta. Within the same jurisdiction, completion rates varied between group of major trades and, more significantly, between single trades. Some trades posted completion rates twice the rates of other trades. Industrial and mechanical trades often posted the highest completion rates, while building construction trades posted the lowest. Also, in all three jurisdictions, many apprentices took more time than the nominal duration of the program to actually complete an apprenticeship program. The study also found an apparent relationship between the age of the apprentice at the start of the program and the likelihood of completion in two of the three jurisdictions (Ontario and Alberta) with the younger completing in higher proportion than the older; however, there was no apparent relationship between the nominal duration of a program and the completion rate.

1. Introduction

In 2005, Statistics Canada released a study on the 1992 cohort of registered apprentices.¹ The study looked closely at the completion and discontinuation trends in apprenticeship programs for the 1992 cohort over an 11-year period from 1992 to 2002 using longitudinal data created from the Registered Apprenticeship Information System (RAIS). Three jurisdictions were included in the study: New Brunswick, Ontario and Alberta. The main result was that: *"half of the apprentices completed the trade they had started, almost half dropped out and depending on the jurisdiction, 5% to 12% were still continuing after 11 years"* (Prasil, page 6). This new study examines the same issue for the cohort of registered apprentices that started the following year, in 1993, and compares the results with those for the 1992 cohort.

The purpose of this study is to provide measures of completion of apprenticeship programs and information on the learning paths of the apprentices over time. The need for accurate indicators of the success of apprenticeship programs is important in order to ensure that apprenticeship programs continue to meet the demand for skilled workers in Canada. The cohort approach, based on individual-level data, provides more accurate information than that based on aggregate data. The cohort approach has the advantage that it can also provide information on the learning paths of apprentices as it follows the same group of apprentices over several years.

For this project, a new longitudinal file was created from the Registered Apprenticeship Information System (RAIS) for apprentices who started a new trade in 1993. The data were linked from 1993 to 2003 for jurisdictions that reported individual data to the Registered Apprenticeship Information System (RAIS) for the whole period. This excluded Newfoundland, Nova Scotia, Prince Edward Island, Manitoba and Saskatchewan, which all reported aggregate data for some of those years. This study also excludes British Columbia because the identifier structure of their data changed between 1993 and 1994; the Territories, because the numbers of apprentices were too low; and Quebec, because of the need for data reconciliation. Therefore, as in the 1992 cohort study, this study includes New Brunswick, Ontario and Alberta.

An overview of the apprenticeship training programs is presented in Chapter 2. Chapter 3 discusses data preparation and limitations. Chapter 4 compares the 1993 and the 1992 cohorts at the provincial level. Detailed tables that replicate, for the most part, the tables shown in the 1992 cohort study are shown in the appendix; summary tables and charts are presented in the text. Conclusions are presented in Chapter 5.

2. An overview of the apprenticeship training system in Canada

Registered apprenticeship training is well-established in Canada. All provinces and territories require, as part of the training programs, periods of in-class and on-the-job training over the designated length of the apprenticeship program. In most provinces and territories, the in-class and on-the-job training are taken together each year of the program, but in separate sessions during the year. Only in Quebec is all the technical in-class training completed prior to beginning the required period of on-the-job training.

The length of apprenticeship training in each trade depends on the province or territory and, in most cases, is two to five periods in length (either years or levels depending on the province and territory). The in-class technical training over these years is anywhere from 4 to 12 weeks each year, again depending on the jurisdiction, and can be taken in full-time blocks or as modular, part-time evening or weekend courses. The actual elapsed time taken by some individuals to complete their apprenticeship training can be considerably longer than the standard program length.

Upon completion of the in-class and on-the-job training portions of the program, the apprentice is eligible to write an examination and, if successful, is given a Certificate of Apprenticeship and a Certificate of Qualification, allowing them to become a certified Journeyperson. A certified Journeyperson is recognized as a qualified and skilled person in a trade and is entitled to the wages and benefits associated with that credential. Journeypersons are allowed to train and act as mentors to registered apprentices.

In order to become a registered apprentice, most provinces and territories require the individual to be a minimum age of 16 and again, depending on the jurisdiction and trade, to have successfully completed grade 12 or have an equivalent amount of work experience and related education. The prospective apprentice must then find an employer who is willing to provide the required training and who employs qualified journeypersons to train and mentor the apprentice. The apprentice and the employer sign an agreement that outlines the terms of the apprenticeship; this contract is registered with and administered by the apprenticeship branch of the respective province or territory.

Registered apprenticeship training in a trade can be either compulsory or voluntary, depending on the regulations of each province or territory. If a compulsory trade, work is restricted to individuals who must be either a journeyperson with a Certificate of Qualification or a registered apprentice receiving training. In voluntary trades, persons working in the trade are not required to be a licensed journeyperson or a registered apprentice; however, the trade is regulated by the province or territory and formal apprenticeship training is available.

Certain trades across Canada have been recognized as Interprovincial Standards Red Seal trades. The Red Seal Program is based on nationally accepted national occupation standards and inter-provincial examinations. Upon successful completion of the Red Seal exam, a journeyperson will receive the Red Seal endorsement and may work anywhere in Canada where the trade is Red Seal designated without having to be recertified. There are currently 49 Red Seal trades in Canada.

3. Data preparation and limitations

3.1 The Registered Apprenticeship Information System

The Registered Apprenticeship Information System (RAIS) survey obtains information on the number of apprentices registered in each province and territory across Canada. The information is requested from provincial and territorial ministries responsible for apprenticeship training and extracted from administrative files.

The purpose of the survey is to gather information on individuals who receive training and those who obtain certification within a trade where apprenticeship training is being offered. The survey compiles data on the number of registered apprentices taking in-class and on-the-job training in trades that have been designated as either Red Seal trades or non-Red Seal trades. It also compiles data on the number of certificates granted to apprentices and trade qualifiers in Red Seal and non-Red Seal trades.

The survey gathers data annually on the number of individuals which are registered and continuing their training, newly registered, discontinued, successfully completed and received certificates in qualified apprenticeship programs over a calendar year. Certification information is obtained on registered apprentices who have successfully completed, as well as trade qualifiers, receiving provincial and Red Seal qualifications in a designated trade. Since 1991, the survey has been requesting individual micro level information on each apprentice concerning, not only the above mentioned information, but also their gender, age, sponsorship, date of registration, time of completion, in-class and on-the-job credits, reason for leaving the program and prior trade certification.

3.2 Methodology for creating a longitudinal apprenticeship-training database

The first stage of the analysis consisted of preparation of the longitudinal database. Data from the annual Registered Apprenticeship Information System (RAIS) survey were linked for the period 1993 to 2003 using the unique provincial identifiers attached to the individual Registered Apprenticeship Information System (RAIS) records.² Only those variables that were considered to be reliable across provinces were kept in the database; these were the same variables that were included in the 1992 database. These variables provided information on the province/territory, age, sex and trade of apprentices and their learning status over the year as well as information on their certification. Once the database was created, some adjustments to the data were made to improve the coherence of the longitudinal information. This was necessary because the Registered Apprenticeship Information System (RAIS) annual survey was not designed originally for longitudinal analysis and, therefore, the data had not been verified for consistency **on an individual basis** from year to year.

Most of the specifications that were used to improve the coherence of the 1993 data were the same as those that had been applied to the 1992 data. As a result, comparisons between the two cohorts were not affected. In general, problems in the data that were identified were similar to those in the 1992 data:

- wrong trade changes (usually these were frequent trade changes over the years for the same apprentice that were likely due to changes in a jurisdiction's trade code structure);
- not real starters (these were apprentices who were recorded as having completed in the starting year (1993) a program for which the duration was nominally two years or more);³
- apprentices recorded as having completed in the same trade twice;
- apprentices recorded as having discontinued in the same trade in two consecutive years;
- apprentices who were recorded as having skipped years with no indication of discontinuation or new registration or reinstatement;
- continuers with no records in the following years;
- completers in a trade who were recorded as having continued or discontinued in the same trade in the following years; and
- individuals who were recorded as being continuers in a new trade with no new registration.

Differences may also exist across provinces, since each province has its own set of apprenticeship programs and its own apprenticeship information system.⁴ First, a year of apprenticeship may be defined differently across provinces. Second, provinces do not necessarily proceed the same way in the 'discovering' of cases of discontinuation and, as a consequence, there may be differences across provinces in the estimation of the timing of discontinuation. Third, provinces may or may not track the number of hours of on-the-job training and therefore, may not have an accurate indicator of the activity status of the apprentices. Finally, we note that individual identifiers are not transferable from one province to another; as a result, it is not possible to track an apprentice's status across provinces.

4. Provincial analysis

As was the case with the 1992 cohort of registered apprentices, the 1993 cohort of apprentices began their programs during a recession which marked the 1991 to 1995 period. In fact, since the two cohorts shared ten of the eleven years covered by this analysis, one would not expect to find large differences between them with respect to rates of completion or discontinuation.

In the following section, results are presented separately for each jurisdiction. Data definitions are shown in Box 1.

Box 1

Data definitions

In this report, the 1993 cohort of registered apprentices is the group of individuals who were new registrants in an apprenticeship trade program in 1993. They may have been in an apprenticeship program prior to 1993, but they had to be new in a specific trade program in 1993.

A cohort is defined and followed exclusively within the limit of a single province since the unique apprentice identifier in the database is exclusive to each province.

At any point in time, a registered apprentice can be a continuer, a discontinuer or a completer.

- A continuer is an apprentice who is still registered in the same apprenticeship trade program;
- A discontinuer is an apprentice who has interrupted or left the program before completion;
- A completer is someone who has completed a trade program; in Registered Apprenticeship Information System (RAIS) terms, this means that the individual has received a certificate of qualification at the end of the apprenticeship program.

As in the 1992 study, series of tables⁵ provide the cumulative numbers and proportions of completers (Tables A.2, A.7, A.12) and of discontinuers (Tables A.3, A.8, A.13) after 11 years and the number of continuers in 2003 (Tables A.4, A.9, A.14). Since the same individual could have been a discontinuer and a completer at different points in time over the 11-year period, some individuals may be included in more than one table. As a result, the sum of the proportions of completers, discontinuers and continuers in 2003 can be more than 100% as some individuals are counted twice.

The tables shown in the text have a more restrictive definition of learning status. Each apprentice is assigned only one status. An individual is counted 1) as a completer if he/she completed a program over the 11-year period whether or not he/she interrupted once during the period 2) as a discontinuer if he/she discontinued a program and never completed one over the period. Those who never completed or discontinued a program over the 11-year period are counted as continuers in 2003.

The trade indicated in all tables and charts is the one that the individual began in 1993. That individual may have completed or certified in another trade by 2003 but nevertheless is counted in the 1993 trade. Indicators are provided for the proportion of individuals who completed in the trade in which they were registered in 1993.

The age of the apprentice is their age in 1993 at the start of the program.

The nominal duration of a program is the time a program should take a registered apprentice to complete assuming continuity of the training and constant progress by the apprentice. For specific trade programs with competency-based curricula, the nominal duration is taken as the nominal duration of similar time-based programs.

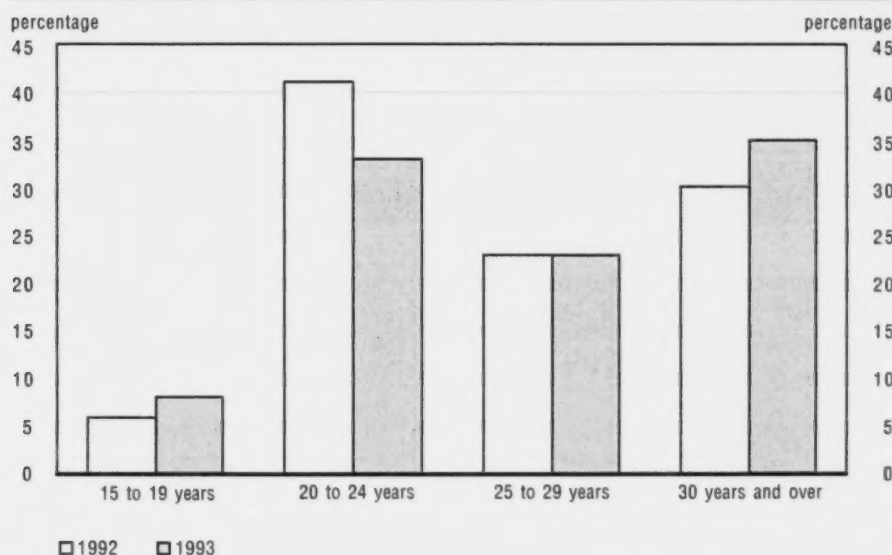
4.1 New Brunswick

Results by gender, age, and trade

In 1993, 921 people started an apprenticeship program in New Brunswick and almost all of them were male (95%). This is about the same as in 1992 with 904 starters and 92% male. All major trade-group programs included mostly male apprentices with the exception of the food and service trade group, where 43% were female. About one third of the new apprentices in 1993 were aged 30 and over when they began their program and another third was aged 20 to 24, which is about the same as for the 1992 starters (Chart 1). The presence of a significant proportion of new registrants aged 30 and over is a characteristic of the apprenticeship learning programs in all jurisdictions. The average age of the apprentices who started an apprenticeship program in 1993 in New Brunswick was 27.7 years old.

Chart 1

Distribution of the 1992 and the 1993 new registered apprentices by age group, New Brunswick



The most common major trade groups in New Brunswick for the 1993 cohort of apprentices were the motor vehicle and heavy equipment group (23%) and the industrial and mechanical group (21%). The motor vehicle and heavy equipment trade group was also the most common in the 1992 cohort. However, in 1993, a higher proportion of apprentices were registered in the industrial and mechanical trades group at the expense of the construction building trades, the metal fabricating trades and the food and service trades groups (Chart 2). The number of newly registered apprentices in the industrial and mechanical trades posted a 45% increase while the same number in the building and construction trades, in the food and services trades and in the metal fabricating trades posted a 16%, 16% and 21% decrease respectively. Periods of recession tend to have larger relative impact on construction-related trades and that may have played a role in the shift toward the industrial trades. Trades that were most common among the new apprentices of

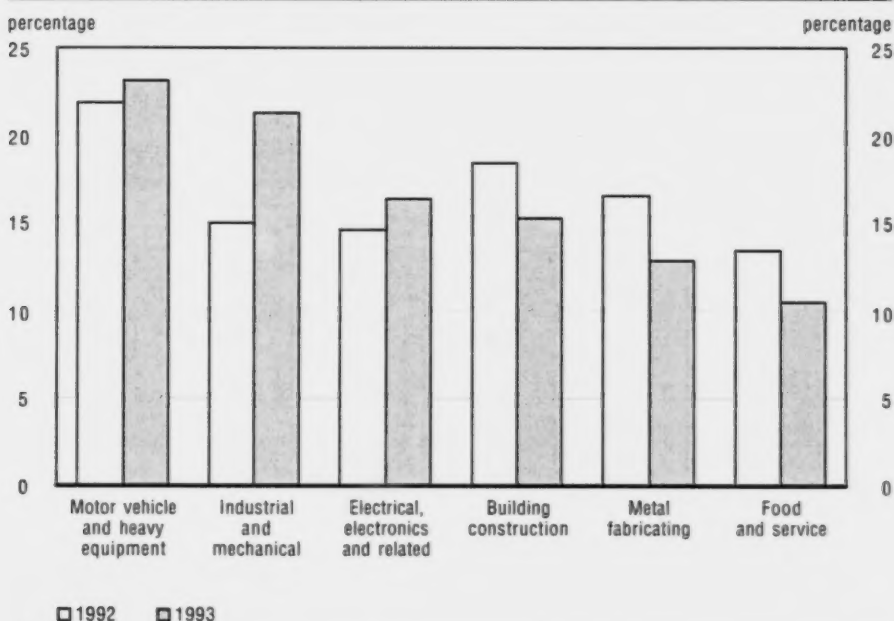
1993 in New Brunswick were automotive service technician, construction electrician, carpenter and industrial instrument mechanic.

Rates of completion, discontinuation and continuation

Of the 921 apprentices who started an apprenticeship program in 1993 in New Brunswick, 47% had completed after 11 years (Text table 1). Most of those completers (90%) had never interrupted their program before completion and 93% of them had completed in the trade in which they were registered in 1993 (Table A.2.1). Conversely, 50% of the 1993 cohort of apprentices had discontinued at some point without ever completing a program over the 11-year period. Most discontinuers stopped once and never returned to an apprenticeship program, at least in the same jurisdiction. Finally, the other 3% consisted of apprentices who were still registered in a program in 2003 and who had never completed nor interrupted a program since registering in 1993.⁶ These rates are similar to those found for the 1992 cohort.

Chart 2

Distribution of the 1992 and the 1993 new registered apprentices by major trade group, New Brunswick



Text table 1

Proportion of completers, discontinuers and continuers, 1992 and 1993 cohorts of registered apprentices, New Brunswick

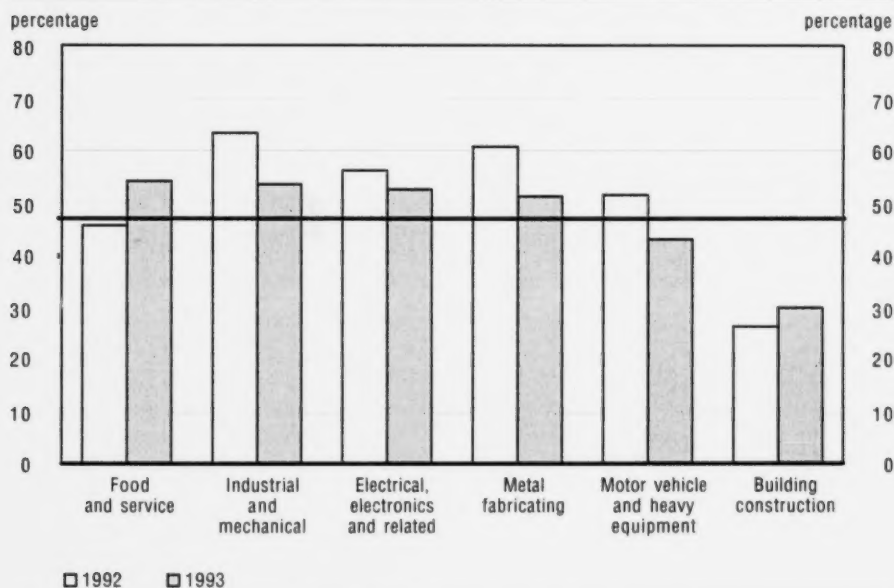
Status	1992	1993
	percentage	
Completers	50	47
Discontinuers who never completed	47	50
Continuers after 11 years who never completed nor discontinued	3	3
Total	100	100

Completions by major trade group⁷

Completion rates vary by major trade group. For the 1993 cohort, four of the six major trade groups⁸ showed rates of completion slightly above 50%: the food and services group, the industrial and mechanical group, the electrical, electronics and related group and the metal fabricating group. For these four groups, rates were similar, varying between 51% and 54%. Two groups showed rates below the average of 47%: the motor vehicle and heavy equipment group with a rate of 43% and, more significantly, the building construction group with a rate of just 30% (Chart 3). In comparison with the 1992 cohort, the completion rates of the 1993 cohort by major trade group showed some changes. Completion rates were down by 10 percentage points in three trade groups: industrial and mechanical trades, metal fabricating trades and motor vehicle and heavy equipment trades. In contrast, the completion rate was up by 8 percentage points in the food and service trades. The result of these changes is that rates of completion were more similar across trade groups in the 1993 cohort than they were in the case of the 1992 cohort. The exception was the building-construction trade group that showed a rate of completion that was significantly below the average rate in both cohorts. This is comparable to the situation in other provinces and appears to be a characteristic of that trade group, at least for the cohorts that started in 1992 and 1993.

Chart 3

Completion rates by major trade groups, 1992 and 1993 cohorts of registered apprentices, New Brunswick



Note: The cursor represents the 1993 completion rate average of all major trade groups.

Completion by selected trades

The comparison of completion rates between cohorts for specific trades in New Brunswick is based on small numbers. However, we selected a limited list of single trades that had a reasonable number of apprentices in both cohorts (Text table 2). Three out of seven trades showed a notable change in rates and four showed similar rates. The rates were significantly down for the automotive service technicians and the construction electricians. The most significant change was however for plumbers with a rate of completion that went from 56% in the 1992 cohort to 38% in the 1993 cohort.

Text table 2

Completion rates for specific trades, 1992 and 1993 cohorts of registered apprentices, New Brunswick

Trade	1992	1993
		percentage
Welder	62	65
Industrial mechanic-millwright	65	64
Construction electrician	53	44
Automotive service technician	56	41
Cook	36	40
Plumber	56	38
Carpenter	22	24

Within the same cohort, significant differences exist between trades when looking at the proportions of individuals completing an apprenticeship program. For example, in both cohorts, the proportion of completions was three times higher for industrial mechanics millwrights and welders than for the carpenters. Carpenters had the lowest completion rate at 22% for the 1992 cohort and 24% for the 1993 cohort, whereas industrial mechanics millwrights and welders had completion rates at about 65% in both years.

Completion, age and duration of the program

For both the 1992 and the 1993 cohorts in New Brunswick, completion rates did not vary by the age of the apprentices when they began their programs. An exception applies to those who started their program at the age of 40 or more; the average completion rate for this group was 38% compared to the average overall rate of 47%. This finding is different from that observed for Ontario and Alberta where age at the start of an apprenticeship program is related to completion rates. Also, there is no apparent relationship between the nominal duration of the program and the proportion of apprentices who complete the program (Table A.2.2). This was also the case for the 1992 cohort.

Return after discontinuation

Only 11% of the 1993 starters who discontinued an apprenticeship program in New Brunswick eventually returned to a program, either the same program or a different one (Table A.3.1⁹). This rate is similar to that found for the 1992 cohort. Among those who eventually returned, about half eventually completed a program.

Timing of completion

Another important indicator of the success of apprenticeship training programs is the amount of time that apprentices actually take to complete a program. The time is dependent in part on the nominal duration or curriculum of the program, since these durations vary.

As in the 1992 cohort study, the proportion of completers who took a time less than or equal to the nominal duration of the program plus one year was calculated. In the 1993 cohort in New Brunswick, the proportion was 63% (Table A.2.1). This proportion is the same as that found for the 1992 cohort. A significantly higher proportion of apprentices completed within that duration in the food and services group (73%) than in the metal fabricating group (59%) and the building construction group (57%). In all three groups, however, the majority of completers completed their programs within the nominal duration of the program plus one year.

In order to see if the completers took more time than the nominal duration to complete their program, the median duration, which is the duration at which half of the completers have completed, was compared with the nominal duration (Table A.2). In a majority of trades, the median duration was higher, which means that more than half of the completers took longer than the nominal duration of the program to complete. Construction electrician apprentices are the ones with the highest proportion not completing within the nominal duration; in fact, half of the completers in that trade took more than seven years to complete whereas the nominal duration was five years.

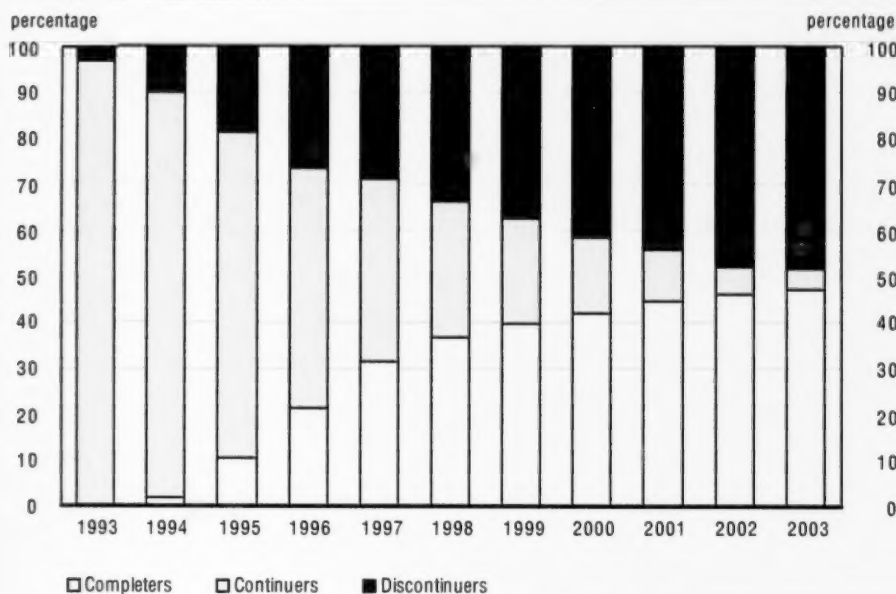
Considering all apprenticeship programs combined, 77% of completions occurred within 6 years and the majority (55%) completed between 4 and 6 years after the start of the program (Table A.5). These proportions are similar to those for the 1992 cohort.

Status of learning over eleven years

Chart 4 shows the cumulative proportions of continuers, discontinuers and completers by year for the 1993 to 2003 period for New Brunswick. The chart shows the attrition in the size of the continuer group over the years and the corresponding increases in the proportions of discontinuers and completers. Very few apprentices discontinued after the first year. Then, in the following two years, the number of discontinuers grew faster than the number of completers so that, at the end of the third year, the number of discontinuers was twice the number of completers. In the fourth and fifth years, the number of completers increased grew faster so that, at the end of the fifth year, the numbers of completers and discontinuers were equal (at 30% each).

Chart 4

Learning status of the 1993 cohort of registered apprentices over an 11-year period, New Brunswick



The jump in the number of completions between the third and fifth years can be explained in part by the fact that the nominal duration for most programs is between 3 to 5 years. Also, economic conditions had begun to improve by 1996 and 1997. Overall, the median duration for completion for the 1993 cohort in New Brunswick was five years.

4.2 Ontario

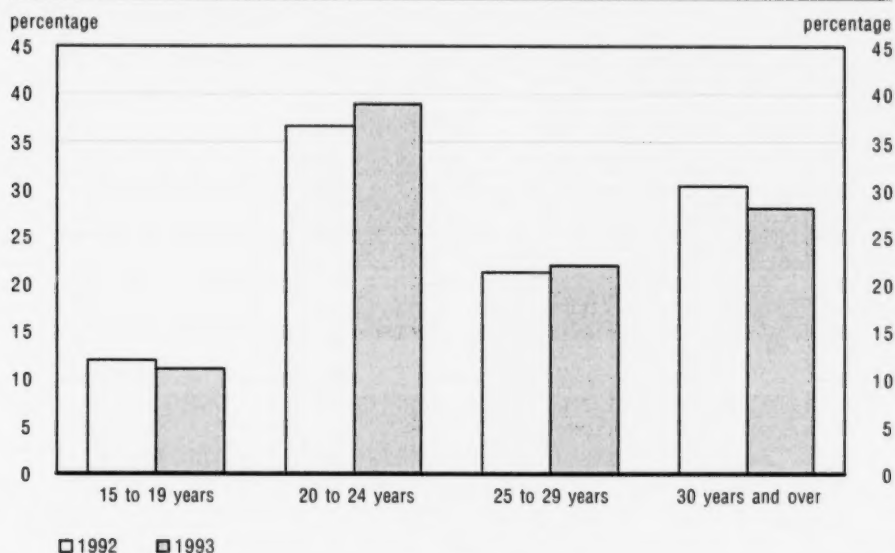
Numbers by gender, age and trade

In 1993, 9,023 people were registered in an apprenticeship program in Ontario and the majority were males (85%). That number represented an increase of 8% over the 1992 registrations that numbered 8,342 starters with a slightly higher proportion of males (91%). In fact, the increase in the number of new apprentices, as well as the change in the proportion of males, is explained by a sudden rise in the number of hairdresser/hairstylist apprentices in 1993. This was the result of a consolidation of the apprenticeship program in hairstyling in Ontario that year, with the result that the number of new registrations in that trade rose from 394 in 1992 to 1,084 in 1993. The increase in the number of hairdressers/hairstylists had an impact on the proportion of females among new apprentices in the food and services group overall, raising that proportion from 48% in 1992 to 65% in 1993. The only other group that included a significant proportion of females was the miscellaneous group "other trades," at 12%. The other five major trade groups had almost exclusively male apprentices.

The average age of apprentices who started an apprenticeship program in 1993 in Ontario was 26.7 years old. About 30% of the new apprentices in 1993 were aged 30 or more when they began their program, close to 40% were aged 20 to 24, while those aged less than 20 accounted for 11%. The age composition of the 1993 starters was about the same as that of the 1992 starters (Chart 5). However, the proportion of new apprentices aged 30 or more varied greatly by major trade group; they accounted for 46% of apprentices in the industrial and mechanical trade group compared to about 20% in the motor vehicle and heavy equipment group and the metal fabricating group (Table A.6.1).

Chart 5

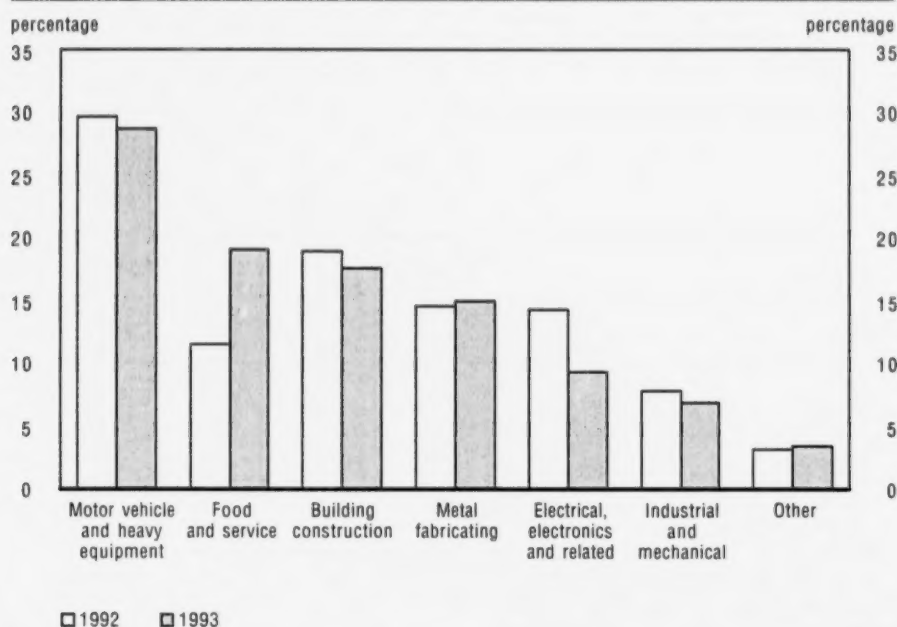
Distribution of the 1992 and the 1993 new registered apprentices by age group, Ontario



The most common major trade group in Ontario for the 1993 cohort of apprentices was the motor vehicle and heavy equipment group (29%), followed by the food and services group (19%) and the building construction group (18%) (Chart 6). The industrial and mechanical trades represented only 7% of all apprentices. Compared with the 1992 cohort, there was an increase in the share of the food and services group from 12% to 19%, explained in part by the increase in the number of hairstylists/hairdressers noted above. There was a decrease in the share of the electrical, electronics and related group from 14% to 9% and little change in the shares of the five other major groups. The increase in 1993 in the number of newly registered apprentices in the food and services group was 77%, while the decrease in the electrical, electronics and related group was 30%. In the five other major trade groups, the variation was not as significant, except for the metal fabricating group and the trade group "other" with an increase of 12% and 18% respectively. The most common trade in the 1993 cohort of apprentices in Ontario was automotive service technician, followed by hairstylist, construction electrician and carpenter.

Chart 6

Distribution of the 1992 and the 1993 new registered apprentices by major trade group, Ontario



Completion, discontinuation and continuation proportions

Of the 9,023 apprentices who started in 1993 in Ontario, 50% had completed an apprenticeship trade program 11 years later (Text table 3). Of those completers, 95% had never interrupted their program before completing it and almost all (96%) had completed the trade program in which they were registered in 1993 (Table A.7.1). Conversely, over the 11-year period, 41% had discontinued at some point without ever completing; most of these discontinuers did not return after leaving once. The other 9% include apprentices who were still registered in 2003, but who had not yet completed nor interrupted a program. The proportions of completers, discontinuers and continuers in 2003 were similar to those for the 1992 cohort. The relatively high proportion of continuers after eleven years in an apprenticeship program is a characteristic of Ontario data.¹⁰

Completion by major trade group

Completion rates vary by major trade group. In the 1993 cohort in Ontario, two major trade groups posted completion rates markedly above average: the industrial and mechanical group with a rate close to 70% and the electrical, electronics and related group with a rate just above 60%. Three groups were around the 50% average: food and services (55%), metal fabricating (55%) and motor vehicle and heavy equipment (51%).

Text table 3

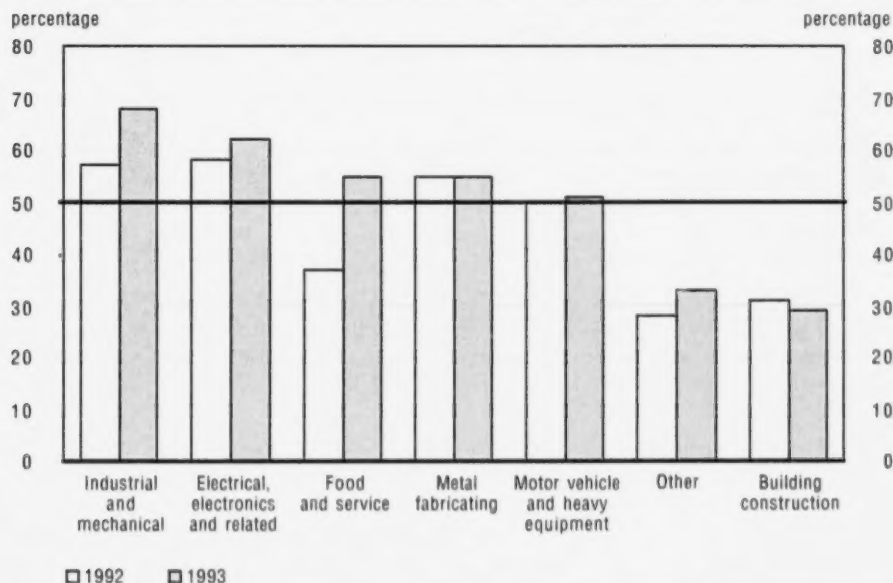
Proportion of completers, discontinuers and continuers, 1992 and 1993 cohorts of registered apprentices, Ontario

Status	1992	1993
	percentage	
Completers	47	50
Discontinuers who never completed	45	41
Continuers after 11 years who never completed nor discontinued	8	9
Total	100	100

Two were significantly below average: the miscellaneous group "other" with a rate just above 30% and the building construction group with a rate just below 30%. For five of the seven trade groups, the completion rates of the 1993 cohorts were similar to the ones of the 1992 cohort. The two groups where the completion rates changed from the 1992 to the 1993 cohort were the industrial and mechanical group (9 percentage points higher) and the food and services group (18 point higher) (Chart 7). In this last case, the increase was due to the hairdresser/hairstylist trade which formed a larger proportion of that major trade group in 1993 and which had a completion rate that increased to 69% for the 1993 cohort from 49% in the 1992 cohort. Notably, as was the case for New Brunswick, the rate of completion for the building construction group was particularly low for both the 1992 and 1993 cohorts.

Chart 7

Completion rates by major trade groups, 1992 and 1993 cohorts of registered apprentices, Ontario



Note: The cursor represents the 1993 completion rate average of all major trade groups.

Completion by selected trades

Trades that had at least 100 newly registered apprentices in 1993 were selected in order to compare completion rates for the 1992 and the 1993 cohorts. The next table shows these trades listed in descending order of the rates of completion for the 1993 cohort (Text table 4). Of the 17 selected trades, only two showed rates that were significantly different between the two cohorts: the rate for hairdressers/hairstylists, as noted previously, rose to 69% from 49% and the rate for industrial electricians rose from 45% to 62%. The hairdresser/hairstylist trade was obviously not composed of the same population in the 1992 and in the 1993 cohorts. The remainder of the trades showed very similar rates of completion for the two cohorts.

Text table 4

Completion rates for specific trades, 1992 and 1993 cohorts of registered apprentices, Ontario

Trade	1992	1993
	percentage	
Industrial mechanic-millwright	64	71
Hairstylist/hairdresser	49	69
Refrigeration and air conditioning mechanic	64	66
Construction electrician	64	64
Tool and die maker	65	63
Industrial electrician	45	62
Building service technician	61	59
Plumber	63	58
Automotive service technician	54	56
Sheet metal worker	57	53
Machinist	49	51
Moulder and engraver	46	50
Motor vehicle body repairer	30	34
Native residential construction worker	35	33
Cook	32	33
Carpenter	34	28
Landscape gardener	17	19

However, within the same cohort, there were large differences across trades. In the 1993 cohort, the top six trades had completion rates of over 60%. The industrial mechanic-millwright trade was in first position, at 71%. Five trades had completion rates below 35%, with landscape gardener last, at 19%. These large differences suggest that completion of an apprenticeship program may depend as much on the trade (for example, job availability, economic environment, seasonal character of the work, compulsory or voluntary trade) as on the characteristics of the apprentice (age, family situation, education, experience and so on). As was the case for New Brunswick, rates of completion for cooks and carpenters were significantly below the average rate, while completion rates for industrial mechanics were higher than the average.

Completion, age and duration of the program

For both cohorts, completion rates in Ontario appear related to the age of the apprentices at the start of their programs — the older the apprentices at the start of their programs, the lower the completion rate (Table A.7) and the higher the discontinuation rate (Table A.8).

The completion rate was 57% for those who started their apprenticeship program at age 15 to 19 and decreased with age to reach 40% for those who started at age 40 or more. This relationship between age at the start of the program and the completion rate was not found for New Brunswick, with the exception of apprentices aged 40 or more for whom completion rates were lower. However, it was found for Alberta.

In contrast, there is no apparent relationship between the duration of the program and completion rates (Table A.7.2). In fact, for Ontario, higher completion rates were found for programs that had a four-year nominal duration. Those programs include trades that usually show higher completion rates such as the industrial and mechanical trades. This suggests that the nominal duration of the program is a less important factor than the trade itself in determining completion rates.

Return after discontinuation

About 15% of the 1993 starters who discontinued an apprenticeship program in Ontario eventually returned to a program, either the same program or a different one (Table A.8.1). This proportion is lower than the 1992 cohort, in which case 23% of discontinuers had later returned. A little more than half of the 1993 cohort who returned eventually completed a program. Some trade groups showed rates of return significantly higher than others: the electrical, electronics and related group (27%) and the motor vehicle and heavy equipment group (20%) had return rates above the average of 15%. Others, however, showed return rates that were significantly lower than the average: food and services (7%) and building construction (8%).

Timing of completion

In the 1993 cohort, 68% of the completers took a time less than or equal to the nominal duration of the program plus one year, which is a proportion slightly higher than for the 1992 cohort at 63% (Table A.7.1). That proportion varied slightly according to the ages of the apprentices at the start of their programs. Notably, while fewer of them completed, older starters were more likely to complete their programs within the nominal duration plus one year.

There were also differences by trade group. Whereas apprentices in the electrical, electronics and related group were less likely to complete within nominal duration plus one year of their programs, apprentices in the industrial and mechanical and in the food and service groups were more likely to do so. In only one major trade group, the "other trades" group, did more than half of completers take longer than the nominal duration plus one year to complete. Those proportions varied also by single trade, varying between 34% and 84% (Text table 5). Proportions of 80% and over completing their program within nominal duration plus one year were found for hairstylists, cooks, moulders and engravers and tool and die makers,

whereas proportions of less than 50% were found for construction electricians and motor vehicle body repairers.

When the median duration is compared to the nominal duration of the programs without the addition of one year, many trade programs showed that at least half of the completers did not complete within the nominal program duration (Table A.7). However, this comparison for Ontario is affected by the fact that, in the case of many trades, several different nominal durations were indicated in the 1993 Registered Apprenticeship Information System (RAIS) database.

When all programs are combined for the 1993 cohort in Ontario, 87% of completers completed their programs within 6 years, which is a slightly higher proportion than for the 1992 cohort, at 80% (Table A.10).

Text table 5

Proportion of completers who took nominal duration plus one year to complete, 1993 cohort of registered apprentices, Ontario

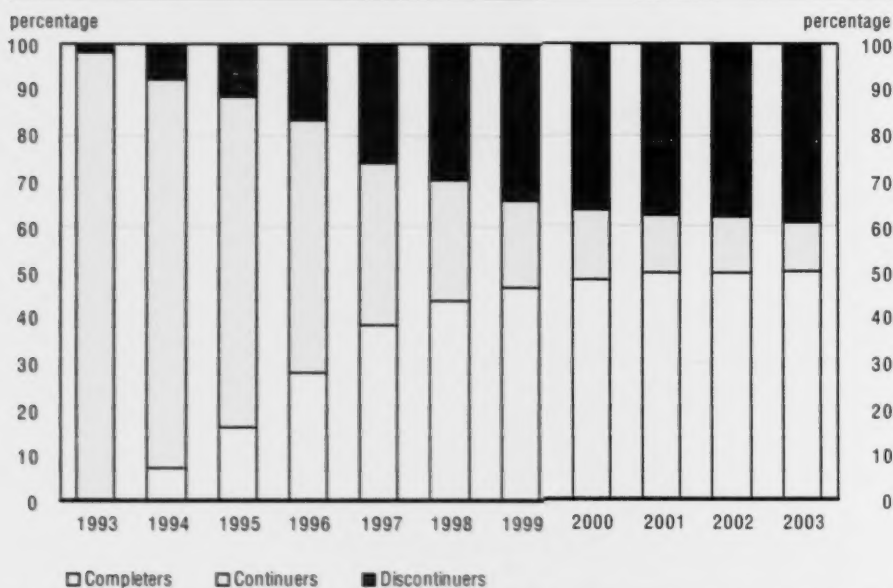
Trade	Took nominal duration plus 1 year	Nominal duration
	percentage	years
Hairstylist/hairdresser	84	2
Cook	82	3
Moulder and engraver	81	3 to 4
Tool and die maker	80	2 to 4
Industrial mechanic-millwright	79	3 to 5
Building service technician	75	2 to 4
Carpenter	74	3
Automotive service technician	72	2 to 4
Native residential construction worker	72	2
Machinist	71	3 to 4
Plumber	66	4
Sheet metal worker	63	4
Refrigeration and air conditioning mechanic	62	3 to 4
Industrial electrician	56	3 to 4
Construction electrician	49	4
Motor vehicle body repairer	34	2 to 3
All trades	68	

Status of learning over eleven years

The cumulative proportions of completers, discontinuers and continuers at each year over the 11-year period for the 1993 cohort of apprentices registered in Ontario are shown in Chart 8. Almost all apprentices continued their programs after the first year. At the end of the second year, the proportions of discontinuers and completers were equal, at 8%. Then, the number of completers grew faster so that, by the end of the fourth year, the proportion of completers was 10 percentage points higher than the proportion of discontinuers; that gap remained about the same until the eleventh year. Most completers had completed by year seven. In fact, the proportion of completers increased by only two percentage points in the last three years of the 11-year study period. The median duration for completion for the 1993 cohort in Ontario was four years.

Chart 8

Learning status of the 1993 cohort of registered apprentices over an 11-year period, Ontario



4.3 Alberta

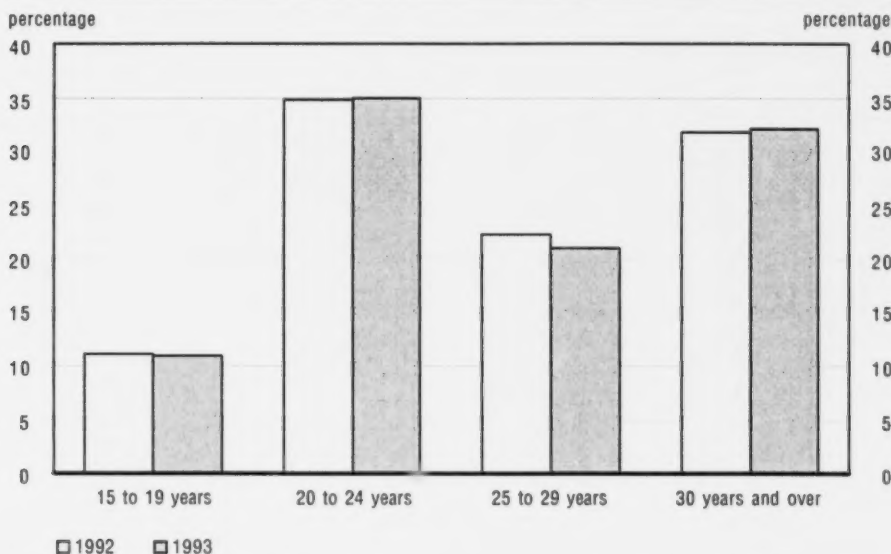
Numbers by gender, age and trade

In 1993, 5,485 people started an apprenticeship program in Alberta and, as in the cases of New Brunswick and Ontario, the vast majority were males (87%). The total number of apprenticeship starts was up by 13% over the previous year (4,848), but the proportion of males (86%) was the same. The growth in the number of apprentices varied across major trade group with four of the seven major trade groups posting a 13% to 19% increase and three having an increase of less than 10%. Five of the seven major trade groups had almost exclusively male apprentices, while females accounted for 63% of apprentices in the food and services group and for 27% in the miscellaneous "other" group.

The average age of the apprentices who began an apprenticeship program in 1993 in Alberta was 27.7 years old. The age distribution of the newly registered apprentices in 1993 was identical to that found for the 1992 cohort — about 32% were aged 30 or more, 35% were aged 20 to 24 and 11% were less than 20 years old (Chart 9). The proportion of apprentices aged 30 or more was significantly higher in the industrial and mechanical trade group, at 57%, and was lower in the food and services trade group, at 24% (Table A.11.1).

Chart 9

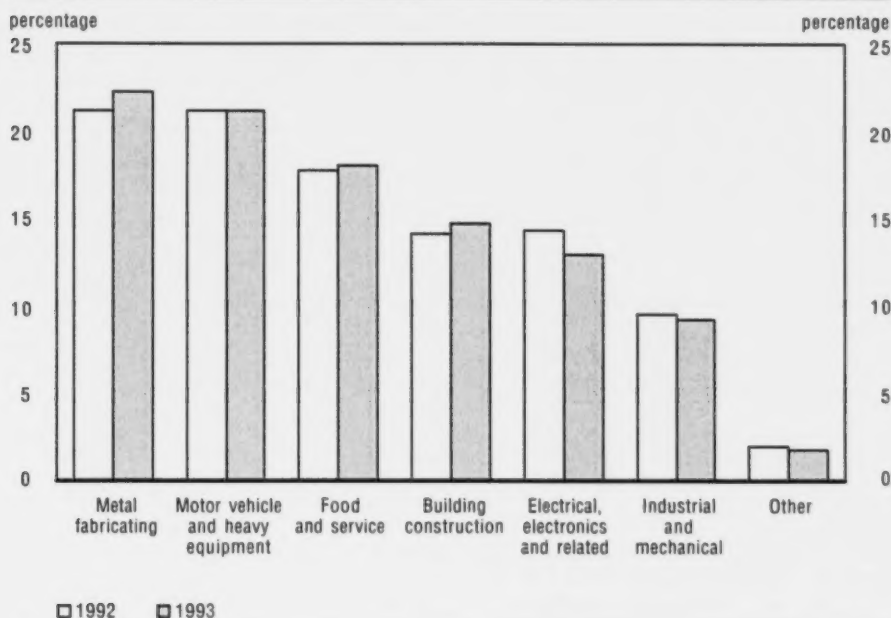
Distribution of the 1992 and the 1993 new registered apprentices by age group, Alberta



As in the case of the 1992 cohort, the most common major trade groups in Alberta for the 1993 cohort of apprentices were the metal fabricating group (22%) and the motor vehicle and heavy equipment group (21%); the industrial and mechanical group was smaller, at 9% (Chart 10). The higher representation of the metal fabricating trades and the heavy equipment trades among new apprentices in Alberta in 1993 reflects the importance of the oil industry in that province. Common trades among apprentices in Alberta in the 1993 cohort were hairstylist, construction electrician, welder, automotive service technician and carpenter.

Chart 10

Distribution of the 1992 and the 1993 new registered apprentices by major trade group, Alberta



Completion, discontinuation and continuation proportions

Among the 5,485 individuals who began an apprenticeship program in Alberta in 1993, 59% had completed an apprenticeship trade program after 11 years (Text table 6). Of these completers, 95% had completed in the trade in which they had registered in 1993 and, as was the case for New Brunswick and Ontario, most of these completers had not interrupted their program before completion (Table A.12.1). Another 41% of the apprentices in the 1993 cohort had discontinued their program at some point without ever completing; the majority of these discontinuers stopped once and never returned to an apprenticeship program up to 2003, at least in Alberta. Finally, there were essentially no cases of apprentices who were continuers in 2003 (registered in an apprenticeship program continuously since 1993 and still registered in 2003).¹¹ These proportions of completers and discontinuers are the same as those calculated for the 1992 cohort.

Text table 6

Proportion of completers, discontinuers and continuers, 1992 and 1993 cohorts of registered apprentices, Alberta

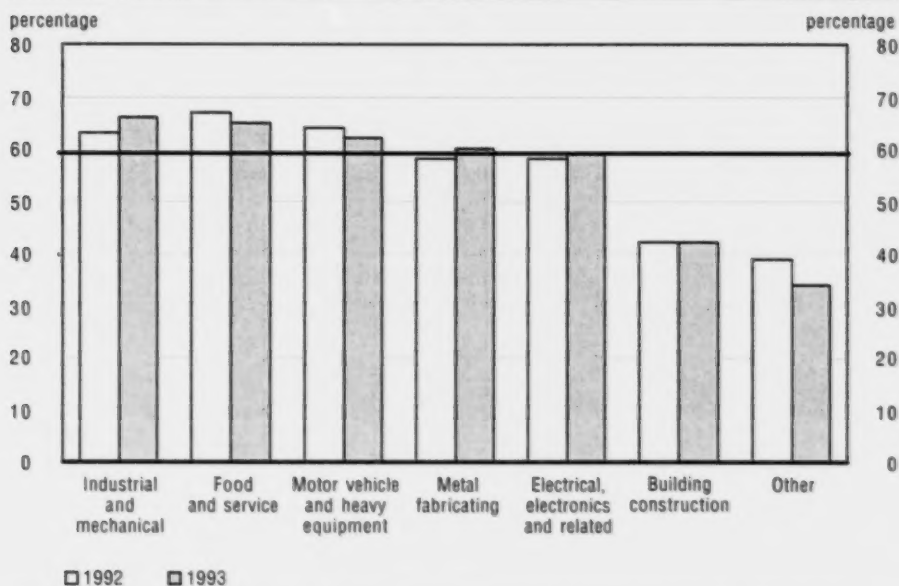
Status	1992	1993
	percentage	
Completers	59	59
Discontinuers who never completed	40	41
Continuers after 11 years who never completed nor discontinued	1	0
Total	100	100

Completion by major trade group

Five of the seven major trade groups show completion rates slightly above the average of 59% (Chart 11). The highest completion rate was in the industrial and mechanical trades, at 66%. The building construction group posted a lower rate of 42%, with the miscellaneous "other trades" group being lowest, at 34%. These rates are similar to those found for the 1992 cohort.

Chart 11

Completion rates by major trade groups, 1992 and 1993 cohorts of registered apprentices, Alberta



Note: The cursor represents the 1993 completion rate average of all major trade groups.

Comparisons across provinces show that the completion rate was also low in the "other trades" group in Ontario, while completion rates in the building construction group were lower than the average in both Ontario and New Brunswick. Similarly, the above-average rate of completion in the industrial and mechanical trade group was also observed in Ontario and New Brunswick.

Completion by selected trades

Completion rates for trades with at least 100 apprentices newly registered in 1993 are shown in Text table 7 (listed in descending order of rates of completion for the 1993 cohort). None of the 14 trades show a significant difference in completion rates compared to the 1992 cohort. Variation in completion rates across trades is not as wide as in the case of Ontario but is nevertheless significant. Four trades show completion rates of over 70% with hairstylists ranking first, at 76% and four show rates between 40% and 50%. Cooks and carpenters had rates of completion below the average, while welders and industrial mechanics millwrights had above-average rates of completion. This is similar to the findings for New Brunswick and Ontario.

Text table 7

Completion rates for specific trades, 1992 and 1993 cohorts of registered apprentices, Alberta

Trade	1992	1993
	percentage	
Hairstylist	78	76
Heavy duty equipment mechanic technician	70	72
Welder	66	71
Industrial mechanic-millwright	78	71
Partsperson	62	62
Construction electrician	58	61
Automotive service technician	64	59
Plumber	58	58
Industrial instrument mechanic	52	57
Motor vehicle body repairer	51	54
Cook	48	49
Steamfitter - pipefitter	50	48
Sheet metal worker	34	41
Carpenter	42	40

Completion, age and duration of the program

For both cohorts, as was the case for Ontario, completion rates varied with the age of the apprentices at the start of their programs, with higher proportions of younger apprentices completing their programs than older apprentices (Table A.12). The completion rate was 69% for those who started between the ages of 15 to 19 and decreasing with age, reaching 48% for individuals who had started their programs age of 40 or more. Conversely, there was no apparent relationship between the duration of the program and the proportion of apprentices who completed the program (Table A.12.2). The two-year trade programs had the highest rates of completion, at 75%; this group of programs includes apprentices in the hairstyling trade program which had the highest rate of completion of all trade programs. Similar to the results found for New Brunswick and Ontario, completion rates are more closely related to the specific trade selected than to the nominal duration of a program.

Return after discontinuation

In the 1993 cohort in Alberta, 22% of the discontinuers eventually returned to a program. This is the same proportion as in the 1992 cohort and higher than in New Brunswick and Ontario (Table A.13.1).¹² Of those discontinuers, 41% experienced more than one interruption, and consequently more than one return, and 59% experienced only one temporary interruption. Slightly more than half of those who returned eventually completed a program. Rates of return varied by major trade group and the groups above and below average were the same as for New Brunswick and Ontario. Above-average rates of return were found for the electrical, electronics and related group (28%) and the motor vehicle and equipment group (27%); rates of return were below average in the building construction group (17%) and the food and services group (14%).

Timing of completion

In the 1993 cohort, two thirds of those who completed a program took less or equal to the nominal duration of the program plus one year to complete, but that proportion varied by trade, varying between 30% and 89% (Text table 8). The proportion for hairstylists was exceptionally high, which may be explained in part by the shorter duration of that program. However, in other cases, there was no apparent relationship between the nominal duration of the program and the proportion of completers who completed within the expected duration. For example, even though the program length was four years, three out of four completers in the steamfitter-pipefitter trade completed within the expected duration, compared to only one out of three for the sheet metal trade.

In the majority of trades, the median duration to completion was greater than the nominal duration of the program, which means that a majority of completers took longer than the nominal duration to complete. The difference was often only one year, but there were trades where the difference was two years (motor vehicle body repair trade) or three years as in the case of the sheet metal trade, in which case half of the completers took seven years or more to complete the four-year program.

When all trade programs are included, for the 1993 cohort in Alberta, 87% of completers completed their programs within 6 years (Table A.15); this is the same proportion as for the 1992 cohort.

Text table 8

Proportion of completers who took nominal duration plus one year to complete, 1993 cohort of registered apprentices, Alberta

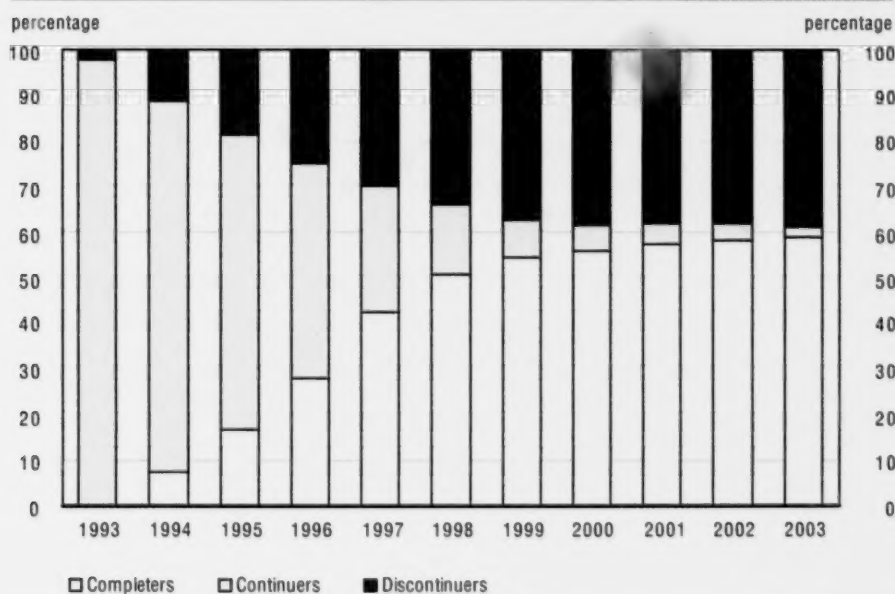
Trade	Took nominal duration plus 1 year	Nominal duration
	percentage	years
Hairstylist	89	2
Cook	77	3
Steamfitter - pipefitter	76	4
Heavy duty equipment mechanic technician	72	4
Partsperson	70	3
Welder	67	3
Industrial mechanic-millwright	67	4
Industrial instrument mechanic	65	4
Automotive service technician	63	4
Carpenter	55	4
Construction electrician	52	4
Plumber	51	4
Motor vehicle body repairer	44	3
Sheet metal worker	30	4
All trades	66	

Status of learning over eleven years

Chart 12 shows the cumulative proportions of completers, discontinuers and continuers over the 11-year period for the 1993 cohort of apprentices in Alberta. Very few discontinued after their first year. In the first four years of the program, the number of discontinuers and completers grew at about the same rate. At the end of the fourth year, the proportions of completers and discontinuers were about equal. The rate of completion rose faster in the fifth and sixth years of the 11-year period so that, by the end of the sixth year, the proportion of completers was about 20 percentage points higher than the proportion of discontinuers. That difference remained the same over the remainder of the period. The median duration for completion in Alberta for the 1993 cohort was five years.

Chart 12

Learning status of the 1993 cohort of registered apprentices over an 11-year period, Alberta



5. Conclusion

This study has provided information on the learning paths of the 1993 cohort of apprentices in New Brunswick, Ontario, Alberta over an 11-year period, comparing the findings with those for the 1992 cohort of apprentices. Overall, the results for the two cohorts are similar in all three provinces. Some differences between the two cohorts were noted for New Brunswick when completion rates were examined by trade group.

The main result was that about half of the apprentices completed a program in New Brunswick and Ontario and close to 60% in Alberta. The rate of completion within a jurisdiction varied by major group of trades and, more significantly, by single trade (for example, in Ontario, rates by trade varied from 19% to 71%). Systematically, in each jurisdiction, the building construction trade group showed completion rates significantly below average, while the industrial and mechanical trade group showed rates significantly above average. The median duration for completing an apprenticeship trade program was 4 to 5 years. For most trades, a majority of completers took a time equal or less than the nominal duration plus one year to complete. However, in some trade groups, a good 40% took more than that duration. When compared to the nominal duration without the addition of one year, the median duration for completers was most often one or two years above. Therefore, the nominal duration usually understates the actual time that the majority of apprentices will take to complete an apprenticeship program.

In Ontario and Alberta, an inverse relationship was found between the age of the apprentice at the start of the program and the likelihood of completion — older apprentices completed in lower proportions than their younger counterparts. This inverse relationship between age at first registration and the likelihood of completion was not found in the case of New Brunswick. However, in all three provinces, more of the apprentices who started at an older age and who completed a program did so within the expected duration.

Among discontinuers, the probability of returning to a program (in the same trade or in a different one) and completing it was low; however, the likelihood of this happening was slightly higher in Alberta. The majority of those who once discontinued an apprenticeship program never returned, at least in the same province up to 2003. Some of those discontinuers may have continued their program in another province, but such inter-provincial moves were not captured in the data. In all three jurisdictions, the same trade groups showed below- or above-average rates of return. Finally, the proportion of the 1993 cohort of apprentices still registered in 2003 varied significantly by jurisdiction, between 4% and 6% for New Brunswick and Alberta and 12% for Ontario.

Economic conditions in Canada began to improve in the latter half of the 1990s. Future research based on more recent cohorts of Canadian apprentices could shed light on the relationship between economic conditions and trends in apprenticeship registrations, completions and discontinuations by trade group and province.

Appendix: Provincial tables

New Brunswick

Table A.1

Distribution of 1993 new apprentices by sex and main trade, New Brunswick, 1993

1993 main trades	Total	Male	Female
	number	percentage	
Total population	921	95	5
Building construction trades	141	x	x
Electrical, electronics and related trades	150	x	x
Food and service trades	96	57	43
Industrial and mechanical trades	197	x	x
Metal fabricating trades	119	100	0
Motor vehicle and heavy equipment trades	213	x	x
Other trades	5	x	x

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.1.1

Distribution of 1993 new apprentices by age group and main trade, New Brunswick, 1993

	Total	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 years and over
	number	percentage				
Total 1993 registered apprentices	921	8	34	23	25	10
Building construction trades						
Carpenter	90	x	37	28	19	x
Other	51	x	35	25	29	x
Total	141	x	36	27	23	x
Electrical, electronics and related trades						
Construction electrician	95	19	36	16	16	14
Other	55	x	25	29	27	x
Total	150	13	32	21	20	12
Food and service trades						
Cook	52	x	37	21	25	x
Other	44	x	27	30	34	x
Total	96	x	32	25	29	x
Industrial and related mechanical trades						
Industrial instrument mechanic	76	x	x	x	41	41
Industrial mechanic-millwright	36	x	x	33	33	x
Production equipment mechanic	28	x	x	x	x	x
Other	57	x	25	32	32	x
Total	197	x	x	21	37	23
Metal fabricating trades						
Plumber	39	x	31	x	28	x
Welder	31	x	x	39	x	x
Other	49	x	33	27	24	x
Total	119	x	32	28	24	x
Motor vehicle and heavy equipment trades						
Automotive service technician	97	18	51	18	x	x
Motor vehicle body repairer	27	x	x	x	x	x
Truck and transport mechanic	32	x	44	x	x	x
Other	57	x	46	26	23	x
Total	213	x	50	19	17	x

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.2

Distribution of 1993 new apprentices and completers, by age group and main trade, New Brunswick, 1993/2003

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total completers	
	years	years	number	number	percentage
Total population	...	5	921	436	47
Age group					
15 to 19 years	...	6	71	37	52
20 to 24 years	...	5	306	151	49
25 to 29 years	...	4	208	94	45
30 to 39 years	...	5	231	116	50
40 years and over	...	4	92	35	38
1993 main trades					
Building construction trades					
Carpenter	4	4.5	90	22	24
Other	...	5	51	20	39
Total	...	5	141	42	30
Electrical, electronics and related trades					
Construction electrician	5	7	95	...	44
Other	...	3	55	...	67
Total	...	5	150	79	53
Food and service trades					
Cook	3	3	52	21	40
Other	...	4	44	31	70
Total	...	4	96	52	54
Industrial and mechanical trades					
Industrial instrument mechanic	4	5	76	34	45
Industrial mechanic-millwright	4	4	36	23	64
Production equipment mechanic	4	5	28	17	61
Other	...	6	57	31	54
Total	...	5	197	105	53
Metal fabricating trades					
Plumber	4	5	39	15	38
Welder	3	4	31	20	65
Other	...	5	49	26	53
Total	...	5	119	61	51
Motor vehicle and heavy equipment trades					
Automotive service technician	4	5	97	40	41
Motor vehicle body repairer	2 to 4	...	27	5	19
Truck and transport mechanic	4	5.5	32	18	56
Other	...	4	57	29	51
Total	...	5	213	92	43
Other trades					
Total	...	...	5	5	100

... not applicable

Note: The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.2.1

Distribution of completers by characteristics of completion, by age group and main trade,
New Brunswick, 1993/2003

	Characteristics of completion					
	Total completers	Left after one completion with no interruption	Others	Completed same trade	Years taken to complete a trade beyond expected duration	
					1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage
Total population	436	90	10	93	63	37
Age group						
15 to 19 years	37	x	x	97	46	54
20 to 24 years	151	86	14	87	54	46
25 to 29 years	94	x	x	96	68	32
30 to 39 years	116	89	11	97	72	28
40 years and over	35	100	0	100	x	x
1993 main trades						
Building construction trades						
Carpenter	22	x	x	x	x	x
Other	20	x	x	x	x	x
Total	42	x	x	100	57	43
Electrical, electronics and related trades						
Construction electrician	42	x	x	88	45	55
Other	37	x	x	100	x	x
Total	79	x	x	94	65	35
Food and service trades						
Cook	21	x	x	x	x	x
Other	31	100	0	x	68	32
Total	52	100	0	x	73	27
Industrial and mechanical trades						
Industrial instrument mechanic	34	x	x	100	74	26
Industrial mechanic-millwright	23	x	x	x	x	x
Production equipment mechanic	17	x	x	x	x	x
Other	31	100	0	x	x	x
Total	105	87	13	91	61	39
Metal fabricating trades						
Plumber / gasfitter	15	x	x	x	x	x
Welder	20	x	x	x	x	x
Other	26	x	x	x	x	x
Total	61	x	x	97	59	41
Motor vehicle and heavy equipment trades						
Automotive service technician	40	x	x	88	70	30
Truck and transport mechanic	18	x	x	x	x	x
Other	29	x	x	x	x	x
Total	92	x	x	87	63	37

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Note: The age group total in table may not add up to the total population because of unknown ages.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.2.2

Distribution of 1993 new apprentices and completers, by trade¹ and duration of program,
New Brunswick, 1993/2003

Program duration from institutions	Total 1993 registered	Total completers
	number	percentage
Total population (1993 trades)	921	47
1 year	16	x
Building construction trades	16	x
Other	16	x
2 years	37	46
Building construction trades	23	x
Native residential construction worker	23	x
Motor vehicle and heavy equipment trades	10	x
Other	6	x
3 years	201	51
Building construction trades	34	x
Other	34	x
Electrical, electronics and related trades	15	x
Other	15	x
Food and service trades	73	53
Cook	52	40
Other	21	x
Industrial and mechanical trades	10	x
Other	10	x
Metal fabricating trades	31	65
Welder	31	65
Motor vehicle and heavy equipment trades	33	42
Other	33	42
4 years	571	47
Building construction trades	107	30
Carpenter	90	24
Other	17	x
Electrical, electronics and related trades	39	82
Other	39	82
Industrial and mechanical trades	167	53
Industrial instrument mechanic	76	45
Industrial mechanic-millwright	36	64
Production equipment mechanic	28	x
Other	27	x
Metal fabricating trades	88	47
Plumber	39	38
Other	49	53
Motor vehicle and heavy equipment trades	170	44
Automotive service technician	97	41
Motor vehicle body repairer	23	x
Truck and transport mechanic	32	56
Other	18	x
5 years or more	96	44
Electrical, electronics and related trades	96	44
Construction electrician	95	44

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. A trade can be in more than one program duration, given provincial duration.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.3

Distribution of 1993 new apprentices and discontinuers¹, by age group and main trade,
New Brunswick, 1993/2003

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total discontinuers	
	years	year	number	number	percentage
Total population	...	4	921	491	53
Age group					
15 to 19 years	...	3.5	71	34	48
20 to 24 years	...	4	306	170	56
25 to 29 years	...	4	208	110	53
30 to 39 years	...	5	231	111	48
40 years and over	...	6.5	92	56	61
1993 main trades					
Building construction trades					
Carpenter	4	6	90	61	68
Other	...	6	51	28	55
Total	...	6	141	89	63
Electrical, electronics and related trades					
Construction electrician	5	3	95	56	59
Other	...	4	55	17	31
Total	...	3	150	73	49
Food and service trades					
Cook	3	4	52	31	60
Other	...	3	44	14	32
Total	...	3	96	45	47
Industrial and mechanical trades					
Industrial instrument mechanic	4	7.5	76	40	53
Industrial mechanic-millwright	4	5.5	36	14	39
Production equipment mechanic	4	5	28	11	39
Other	...	5	57	29	51
Total	...	7	197	94	48
Metal fabricating trades					
Plumber	4	4	39	22	56
Welder	3	6	31	9	29
Other	...	4	49	23	47
Total	...	4	119	54	45
Motor vehicle and heavy equipment trades					
Automotive service technician	4	4	97	63	65
Motor vehicle body repairer	2 to 4	3	27	22	81
Truck and transport mechanic	4	3	32	15	47
Other	...	4	57	36	63
Total	...	4	213	136	64

... not applicable

1. Discontinuers include Stayouts (not coming back) and Stopouts (coming back).

Note: The age group total in table may not add up to the total population because of unknown ages.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.3.1

Distribution of discontinuers¹ by their characteristics, by age group and main trade,
New Brunswick, 1993/2003

	Characteristics ¹						
	Total discontinuers	Com- pleters	Non- completers	One final inter- ruption ²	One temporary inter- ruption ²	Multiple inter- ruptions ²	Years taken to discontinue of a trade beyond expected duration of completion
							1 year or less
	number	%	%	%	%	%	%
Total population	491	6	94	89	9	2	58
Age group							
15 to 19 years	34	x	x	82	x	x	x
20 to 24 years	170	13	87	82	x	x	62
25 to 29 years	110	x	x	93	x	x	61
30 to 39 years	111	x	x	93	x	x	51
40 years and over	56	0	100	98	x	x	41
1993 main trades							
Building construction trades							
Carpenter	61	0	100	97	x	x	48
Other	28	x	x	x	x	x	x
Total	89	0	100	97	x	x	46
Electrical, electronics and related trades							
Construction electrician	56	x	x	82	x	x	x
Other	17	x	x	x	x	x	x
Total	73	x	x	85	x	x	78
Food and service trades							
Cook	31	0	100	100	x	x	x
Other	14	x	x	x	x	x	x
Total	45	x	x	98	x	x	71
Industrial and mechanical trades							
Industrial instrument mechanic	40	x	x	100	x	x	x
Industrial mechanic-millwright	14	x	x	x	x	x	x
Production equipment mechanic	11	x	x	x	x	x	x
Other	29	x	x	x	x	x	x
Total	94	x	x	87	x	x	36
Metal fabricating trades							
Plumber	22	x	x	x	x	x	x
Welder	9	x	x	x	x	x	x
Other	23	x	x	x	x	x	x
Total	54	x	x	89	x	x	54
Motor vehicle and heavy equipment trades							
Automotive service technician	63	x	x	86	x	x	67
Motor vehicle body repairer	22	x	x	x	x	x	x
Truck and transport mechanic	15	x	x	x	x	x	x
Other	36	x	x	72	x	x	61
Total	136	12	88	85	x	x	68

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Dropouts include Stayouts (not coming back) and Stopouts (coming back). Dropouts can also be completers or continuers.

2. Interruptions do not include time away after completing and before starting a new trade.

Note: The age group total in table may not add up to the total population because of unknown ages.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.3.2

Distribution of 1993 new apprentices and discontinuers¹, by duration of program,
New Brunswick, 1993/2003

Program duration from institutions	Total 1993 registered	Total discontinuers
	number	percentage
Total population	921	53
1 year	16	x
2 years	37	57
3 years	201	50
4 years	571	53
5 years	96	59
6 years or more	..	..

.. not available for a specific reference period

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Discontinuers include Stayouts (not coming back) and Stopouts (coming back).

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.4

Distribution of 1993 new apprentices and 2003 continuers, by age group and main trade, New Brunswick

	Total 1993 registered number	2003 continuers percentage
Total population	921	6
Age group		
15 to 19 years	71	x
20 to 24 years	306	6
25 to 29 years	208	7
30 to 39 years	231	6
40 years and over	92	x
1993 main trades		
Building construction trades		
Carpenter	90	x
Other	51	x
Total	141	8
Electrical, electronics and related trades		
Construction electrician	95	x
Other	55	x
Total	150	7
Food and service trades		
Cook	52	x
Other	44	x
Total	96	x
Industrial and mechanical trades		
Industrial instrument mechanic	76	x
Industrial mechanic-millwright	36	x
Production equipment mechanic	28	x
Other	57	x
Total	197	7
Metal fabricating trades		
Plumber	39	x
Welder	31	x
Other	49	x
Total	119	11
Motor vehicle and heavy equipment trades		
Automotive service technician	97	x
Motor vehicle body repairer	27	x
Truck and transport mechanic	32	x
Other	57	x
Total	213	x

x suppressed to meet the confidentiality requirements of the *Statistics Act***Note:** The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.4.1

Distribution of 2003 continuers by their characteristics, by age group and main trade, New Brunswick

	Characteristics				
	2003 continuers	Without a previous completion	Same trade	Without a previous interruption ¹	Pure continuers ²
	number			percentage	
Total population	51	75	51	69	47
Age group					
20 to 24 years	17	x	x	x	x
25 to 29 years	14	x	x	x	x
30 to 39 years	14	x	x	x	x
1993 main trades					
Building construction trades					
Carpenter	8	x	x	x	x
Total	11	x	x	x	x
Electrical, electronics and related trades					
Construction electrician	7	x	x	x	x
Total	11	x	x	x	x
Industrial and mechanical trades					
Total	13	x	x	x	x
Metal fabricating trades					
Total	13	x	x	x	x

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Interruptions do not include time away after completing and before starting a new trade.

2. Pure continuers never interrupted nor completed a program.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.5

Distribution of certified apprentices by duration for certification, by age group and main trade,
New Brunswick, 1993/2003

	Total certified apprentices				
	Certified apprentices	1 to 3 years	4 years	5 or 6 years	7 or more years
	number	percentage			
Total population	432	22	23	32	23
Age group					
15 to 19 years	37	x	x	43	35
20 to 24 years	151	17	23	32	28
25 to 29 years	92	28	26	29	16
30 to 39 years	115	28	22	33	17
40 years and over	34	18	32	29	21
1993 main trades					
Building construction trades					
Carpenter	22	27	x	x	32
Other	20	x	x	50	x
Total	42	24	24	33	19
Electrical, electronics and related trades					
Construction electrician	42	x	x	40	55
Other	37	62	x	24	x
Total	79	x	x	33	33
Food and service trades					
Cook	21	52	29	x	x
Other	31	32	48	x	x
Total	52	40	40	x	x
Industrial and mechanical trades					
Industrial instrument mechanic	33	x	27	48	x
Industrial mechanic-millwright	22	x	41	45	x
Production equipment mechanic	17	x	x	65	x
Other	31	26	16	23	35
Total	103	11	24	43	22
Metal fabricating trades					
Plumber	15	x	x	x	40
Welder	20	30	x	x	x
Other	26	x	x	54	27
Total	61	11	23	38	28
Motor vehicle and heavy equipment trades					
Automotive service technician	39	21	26	33	21
Truck and transport mechanic	17	x	x	x	35
Other	29	41	x	x	28
Total	90	24	23	27	26

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Note: The age group total in table may not add up to the total population because of unknown ages.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Appendix: Provincial tables

Ontario

Table A.6

Distribution of 1993 new apprentices by sex and main trade, Ontario, 1993

1993 main trades	Total	Male	Female
	number	percentage	
Total population	9,023	85	15
Building construction trades	1,587	94	6
Electrical, electronics and related trades	835	97	3
Food and service trades	1,714	35	65
Industrial and mechanical trades	622	98	2
Metal fabricating trades	1,357	99	1
Motor vehicle and heavy equipment trades	2,594	98	2
Other trades	314	88	12

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.6.1

Distribution of 1993 new apprentices by age group and main trade, Ontario, 1993

	Total	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 years and over
	number	percentage	percentage	percentage	percentage	percentage
Total 1993 registered apprentices	9,023	11	39	22	21	7
Building construction trades						
Bricklayer	75	x	35	33	24	x
Building service technician	316	x	x	17	42	30
Carpenter	509	11	36	26	22	6
Cement finisher	87	x	x	x	40	45
Drywall mechanic	74	x	34	26	27	x
Floorcovering installer	70	x	41	19	27	x
Insulator heat and frost	25	x	x	x	x	x
Lather-interior systems mechanic	33	x	39	x	x	x
Native residential construction worker	120	x	21	29	38	x
Plasterer	45	x	x	x	40	x
Roofer	41	x	44	x	x	x
Tile setter	39	x	x	33	41	x
Woodworker	84	x	39	19	18	x
Other	69	x	36	29	22	x
Total	1,587	6	27	23	29	14
Electrical, electronics and related trades						
Construction electrician	644	10	45	23	18	4
Industrial electrician	103	x	24	34	29	x
Powerline technician	37	x	32	x	30	x
Other	51	x	x	31	45	x
Total	835	8	40	25	22	5
Food and service trades						
Baker	47	x	43	x	x	x
Cook	482	9	43	24	15	9
Hairstylist	1,084	14	46	17	16	7
Meat cutter	62	21	40	x	18	x
Other	39	x	x	x	31	x
Total	1,714	13	44	19	16	8
Industrial and related mechanical trades						
Boilermaker	31	x	35	35	x	x
Industrial mechanic-millwright	302	x	21	26	42	x
Industrial plant operator	61	x	x	x	64	21
Refrigeration and air conditioning mechanic	176	x	45	22	26	x
Other	52	x	21	31	35	x
Total	622	3	27	24	38	8

Table A.6.1

Distribution of 1993 new apprentices by age group and main trade, Ontario, 1993 (concluded)

	Total	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 years and over
	number	percentage	percentage	percentage	percentage	percentage
Metal fabricating trades						
Ironworker	31	x	45	x	x	x
Machinist	213	x	36	28	18	x
Moulder and engraver	161	17	47	24	x	x
Plumber	322	x	47	20	18	x
Sheet metal worker	210	x	46	26	16	x
Steamfitter - pipefitter	55	x	42	20	25	x
Steel and plate worker	27	x	x	x	x	x
Tool and die maker	251	x	43	24	16	x
Welder	34	x	x	32	41	x
Other	53	x	34	36	21	x
Total	1,357	12	43	25	18	3
Motor vehicle and heavy equipment trades						
Agricultural equipment technician	30	x	x	x	x	x
Air-cooled and marine engine mechanic (small engines)	37	x	38	x	32	x
Automotive service technician	1,692	19	44	20	14	3
Heavy duty equipment mechanic technician	58	x	41	22	28	x
Mobile crane operator	44	x	30	x	41	x
Motor vehicle body repairer	299	x	47	20	15	x
Motor vehicle transmission mechanic	31	x	39	42	x	x
Motorcycle repair mechanic	36	x	x	x	42	x
Motor vehicle steering suspension and brakes	96	x	44	25	20	x
Small equipment mechanic	48	x	25	x	25	x
Transport trailer technician	29	x	x	x	x	x
Truck and transport mechanic	132	11	38	25	17	8
Other	62	x	44	26	18	x
Total	2,594	16	43	21	16	4
Other trades						
Arborist (tree cutter)	37	x	35	x	35	x
Horticulture	26	x	x	x	x	x
Landscape gardener	140	11	39	17	25	8
Pool and spa installation and service technician	39	x	x	x	28	x
Other	72	x	26	31	33	x
Total	314	7	33	22	28	10

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.7

Distribution of 1993 new apprentices and completers, by age group and main trade, Ontario, 1993/2003

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total completers	
	years	years	number	number	percentage
Total population	...	4	9,023	4,520	50
Age group					
15 to 19 years	...	5	1,008	572	57
20 to 24 years	...	4	3,487	1,855	53
25 to 29 years	...	4	1,994	975	49
30 to 39 years	...	4	1,910	870	46
40 years and over	...	3	622	247	40
1993 main trades					
Building construction trades					
Bricklayer	2	7	75	9	12
Building service technician	2 to 4	3	316	185	59
Carpenter	3	4	509	140	28
Cement finisher	2 to 3	...	87	0	0
Drywall mechanic	2	2	74	10	14
Floorcovering installer	3	7	70	10	14
Insulator heat and frost	3	4	25	19	76
Lather-interior systems mechanic	2	...	33	0	0
Native residential construction worker	2	3	120	39	33
Plasterer	2	...	45	0	0
Roofer	3	3.5	41	12	29
Tile setter	4	...	39	0	0
Woodworker	3 to 4	5.5	84	12	14
Other	...	5	69	11	16
Total	...	3	1,587	462	29
Electrical, electronics and related trades					
Construction electrician	4	6	644	409	64
Industrial electrician	3 to 4	5	103	64	62
Powerline technician	4	4	37	21	57
Other	...	4	51	24	47
Total	...	5	835	518	62
Food and service trades					
Baker	3	4	47	13	28
Cook	3	3	482	157	33
Hairstylist	2	2	1,084	749	69
Meat cutter	2	4	62	8	13
Other	...	3	39	17	44
Total	...	3	1,714	944	55
Industrial and mechanical trades					
Boilermaker	3	5	31	23	74
Industrial mechanic-millwright	3 to 5	4	302	213	71
Industrial plant operator	3 to 4	4	61	40	66
Refrigeration and air conditioning mechanic	3 to 4	5	176	117	66
Other	...	5	52	29	56
Total	...	5	622	422	68

Table A.7

Distribution of 1993 new apprentices and completers, by age group and main trade, Ontario, 1993/2003 (concluded)

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total completers	
	years	years	number	number	percentage
Metal fabricating trades					
Ironworker	3	5	31	22	71
Machinist	3 to 4	5	213	109	51
Moulder and engraver	3 to 4	4	161	80	50
Plumber	4	5	322	188	58
Sheet metal worker	4	5	210	112	53
Steamfitter - pipefitter	3 to 4	5	55	31	56
Steel and plate worker	2	4	27	17	63
Tool and die maker	2 to 4	4	251	159	63
Welder	2 to 5	4	34	12	35
Other	...	3.5	53	20	38
Total	...	5	1357	750	55
Motor vehicle and heavy equipment trades					
Air-cooled and marine engine mechanic (small engine)	2 to 3	3	37	17	46
Agricultural equipment technician	4	5	30	22	73
Automotive service technician	2 to 4	5	1,692	945	56
Heavy duty equipment mechanic technician	4	6	58	19	33
Mobile crane operator	1 to 3	4	44	29	66
Motor vehicle body repairer	2 to 3	5	299	103	34
Motor vehicle steering suspension and brakes mechanics	1 to 2	4	96	40	42
Motor vehicle transmission mechanic	2	5.5	31	10	32
Motorcycle repair mechanic	2	4	36	15	42
Small equipment mechanic	2	4	48	14	29
Transport trailer technician	2	4	29	13	45
Truck and transport mechanic	2	5	132	71	54
Other	...	4	62	21	34
Total	...	5	2,594	1,319	51
Other trades					
Arborist (tree cutter)	3	3	37	17	46
Horticulture	2	2	26	12	46
Landscape gardener	2	3	140	26	19
Pool and spa installation and service technician	2	5	39	10	26
Other	...	5	72	40	56
Total	...	4	314	105	33

... not applicable

Note: The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.7.1

Distribution of completers by characteristics of completion, by age group and main trade, Ontario, 1993/2003

	Characteristics of completion					
	Total completers	Left after one completion with no interruption	Others	Completed same trade	Years taken to complete a trade beyond expected duration	
					1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage
Total population	4,520	95	5	96	68	32
Age group						
15 to 19 years	572	94	6	95	59	41
20 to 24 years	1,855	95	5	96	67	33
25 to 29 years	975	95	5	96	69	31
30 to 39 years	870	96	4	97	71	29
40 years and over	247	x	x	x	76	24
1993 main trades						
Building construction trades						
Bricklayer	9	x	x	x	x	x
Building service technician	185	97	x	99	75	25
Carpenter	140	97	x	95	74	26
Drywall mechanic	10	x	x	x	x	x
Floorcovering installer	10	x	x	x	x	x
Insulator heat and frost	19	x	x	x	x	x
Native residential construction worker	39	46	54	100	72	28
Roofer	12	x	x	x	x	x
Woodworker	12	x	x	x	x	x
Other	11	x	x	x	x	x
Total	462	92	8	96	69	31
Electrical, electronics and related trades						
Construction electrician	409	98	x	97	49	51
Industrial electrician	64	92	x	89	56	44
Powerline technician	21	x	x	x	x	x
Other	24	x	x	x	x	x
Total	518	97	3	96	52	48
Food and service trades						
Baker	13	x	x	x	x	x
Cook	157	97	x	99	82	18
Hairstylist	749	100	x	100	84	16
Meat cutter	8	x	x	x	x	x
Other	17	x	x	x	x	x
Total	944	99	x	100	82	18
Industrial and mechanical trades						
Boilermaker	23	x	x	x	x	x
Industrial mechanic-millwright	213	94	6	97	79	21
Industrial plant operator	40	95	x	98	93	x
Refrigeration and air conditioning mechanic	117	94	x	100	62	38
Other	29	x	x	x	x	x
Total	422	95	5	98	72	28

Table A.7.1

Distribution of completers by characteristics of completion, by age group and main trade, Ontario, 1993/2003 (concluded)

	Characteristics of completion					
	Total completers	Left after one completion with no interruption	Others	Completed same trade	Years taken to complete a trade beyond expected duration	
					1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage
Metal fabricating trades						
Ironworker	22	x	x	x	x	x
Machinist	109	93	x	63	71	29
Moulder and engraver	80	99	x	95	81	19
Plumber	188	91	9	98	66	34
Sheet metal worker	112	95	x	96	63	37
Steamfitter - pipefitter	31	84	x	94	52	48
Steel and plate worker	17	x	x	x	x	x
Tool and die maker	159	97	x	94	80	20
Welder	12	x	x	x	x	x
Other	20	x	x	x	x	x
Total	750	95	5	93	69	31
Motor vehicle and heavy equipment trades						
Agricultural equipment technician	22	x	x	x	x	x
Air-cooled and marine engines mechanic (small engine)	17	x	x	x	x	x
Automotive service technician	945	94	6	97	72	28
Heavy duty equipment mechanic technician	19	x	x	x	x	x
Mobile crane operator	29	x	x	x	x	x
Motor vehicle body repairer	103	96	x	92	34	66
Motor vehicle transmission mechanic	10	x	x	x	x	x
Motor vehicle steering suspension and brakes mechanics	40	80	x	80	28	72
Motorcycle repair mechanic	15	x	x	x	x	x
Small equipment mechanic	14	x	x	x	x	x
Transport trailer technician	13	x	x	x	x	x
Truck and transport mechanic	71	99	x	97	x	87
Other	21	x	x	x	x	x
Total	1,319	94	6	94	62	38
Other trades						
Arborist (tree cutter)	17	x	x	x	x	x
Horticulture	12	x	x	x	x	x
Landscape gardener	26	x	x	x	x	x
Pool and spa installation and service technician	10	x	x	x	x	x
Other	40	93	x	98	35	65
Total	105	88	12	96	58	42

x suppressed to meet the confidentiality requirements of the *Statistics Act***Note:** The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.7.2

Distribution of 1993 new apprentices and completers, by trade¹ and duration of program, Ontario, 1993/2003

Program duration from institutions	Total 1993 registered	Total completers
	number	percentage
Total population (1993 trades)	9,023	50
1 year	65	42
Food and service trades	30	x
Other	30	x
Motor vehicle and heavy equipment trades	33	33
Other	24	x
2 years	2,628	49
Building construction trades	689	32
Bricklayer	75	x
Building service technician	270	57
Cement finisher	37	x
Drywall mechanic	74	x
Lather-interior systems mechanic	33	x
Native residential construction worker	120	33
Plasterer	45	x
Other	35	x
Food and service trades	1,148	66
Hairstylist	1,084	69
Meat cutter	62	x
Industrial and related mechanical trades	14	x
Other	14	x
Metal fabricating trades	55	44
Steel and plate worker	27	x
Welder	15	x
Other	12	x
Motor vehicle and heavy equipment trades	503	42
Air-cooled and marine engine mechanic (small engine)	29	x
Automotive service technician	65	51
Motor vehicle body repairer	28	x
Motor vehicle transmission mechanic	31	x
Motor vehicle steering suspension and brakes mechanics	91	41
Motorcycle repair mechanic	36	42
Small equipment mechanic	48	29
Transport trailer technician	29	x
Truck and transport mechanic	132	54
Other	14	x
Other trades	218	26
Horticulture	26	x
Landscape gardener	140	19
Pool and spa installation and service technician	39	x
Other	13	x

Table A.7.2

Distribution of 1993 new apprentices and completers, by trade¹ and duration of program, Ontario, 1993/2003 (continued)

Program duration from institutions	Total 1993 registered	Total completers
	number	percentage
3 years	1,903	36
Building construction trades	719	26
Carpenter	509	28
Cement finisher	50	x
Floorcovering installer	70	x
Insulator heat and frost	25	x
Roofer	41	29
Other	23	x
Electrical, electronics and related trades	24	x
Industrial electrician	20	x
Food and service trades	535	32
Baker	47	28
Cook	482	33
Other	6	x
Industrial and related mechanical trades	87	59
Boilermaker	31	74
Industrial mechanic-millwright	21	x
Industrial plant operator	32	47
Metal fabricating trades	127	57
Ironworker	31	71
Machinist	17	x
Steamfitter - pipefitter	18	x
Tool and die maker	19	x
Other	40	48
Motor vehicle and heavy equipment trades	341	42
Air-cooled and marine engine mechanic (small engine)	8	x
Mobile crane operator	40	68
Motor vehicle body repairer	271	37
Other	22	x
Other trades	70	54
Arborist (tree cutter)	37	46
Other	33	64

Table A.7.2

Distribution of 1993 new apprentices and completers, by trade¹ and duration of program, Ontario, 1993/2003 (concluded)

Program duration from institutions	Total 1993 registered	Total completers
	number	percentage
4 years	4,412	57
Building construction trades	179	26
Building service technician	46	67
Tile setter	39	x
Woodworker	83	14
Other	11	x
Electrical, electronics and related trades	810	62
Construction electrician	644	64
Industrial electrician	83	61
Powerline technician	37	57
Other	46	46
Industrial and related mechanical trades	505	70
Industrial mechanic-millwright	272	71
Industrial plant operator	29	x
Refrigeration and air conditioning mechanic	174	67
Other	30	x
Metal fabricating trades	1,174	56
Machinist	196	49
Moulder and engraver	160	49
Plumber	322	58
Sheet metal worker	210	53
Steamfitter - pipefitter	37	62
Tool and die maker	231	65
Welder	17	x
Motor vehicle and heavy equipment trades	1,717	56
Agricultural equipment technician	30	x
Automotive service technician	1,627	56
Heavy duty equipment mechanic technician	58	33
Other trades	26	x
Other	26	x
5 years or more	15	x
Industrial and related mechanical trades	14	x
Industrial mechanic-millwright	9	x

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. A trade can be in more than one program duration, given provincial duration.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.8

Distribution of 1993 new apprentices and discontinuers¹, by age group and main trade, Ontario, 1993/2003

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total discontinuers	
	years	years	number	number	percentage
Total population	...	5	9,023	4,003	44
Age group					
15 to 19 years	...	5	1,008	406	40
20 to 24 years	...	5	3,487	1,488	43
25 to 29 years	...	5	1,994	911	46
30 to 39 years	...	5	1,910	890	47
40 years and over	...	5	622	307	49
1993 main trades					
Building construction trades					
Bricklayer	2	6	75	62	83
Building service technician	2 to 4	5	316	101	32
Carpenter	3	6	509	333	65
Cement finisher	2 to 3	6	87	61	70
Drywall mechanic	2	F	74	32	43
Floorcovering installer	3	5	70	59	84
Insulator heat and frost	3	...	25	0	0
Lather-interior systems mechanic	2	7	33	x	x
Native residential construction worker	2	5	120	79	66
Plasterer	2	5	45	x	x
Roofer	3	4.5	41	26	68
Tile setter	4	4	39	30	77
Woodworker	3 to 4	5	84	52	62
Other	...	4	69	54	78
Total	...	5	1,587	965	61
Electrical, electronics and related trades					
Construction electrician	4	5	644	225	35
Industrial electrician	3 to 4	5	103	46	45
Powerline technician	4	6	37	15	41
Other	...	5	51	25	49
Total	...	5	835	311	37
Food and service trades					
Baker	3	5	47	35	74
Cook	3	5	482	264	55
Hairstylist	2	5	1,084	290	27
Meat cutter	2	2	62	54	87
Other	...	5	39	17	44
Total	...	5	1,714	660	39
Industrial and mechanical trades					
Boilermaker	3	4	31	9	29
Industrial mechanic-millwright	3 to 5	5	302	81	27
Industrial plant operator	3 to 4	5	61	11	18
Refrigeration and air conditioning mechanic	3 to 4	5	176	59	34
Other	...	5	52	18	35
Total	...	5	622	176	29

Table A.8

Distribution of 1993 new apprentices and discontinuers¹, by age group and main trade, Ontario, 1993/2003 (concluded)

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total discontinuers	
	years	years	number	number	percentage
Metal fabricating trades					
Ironworker	3	5	31	8	26
Machinist	3 to 4	4	213	97	46
Moulder and engraver	3 to 4	4	161	78	48
Plumber	4	5	322	128	40
Sheet metal worker	4	5	210	93	44
Steamfitter - pipefitter	3 to 4	3.5	55	24	44
Steel and plate worker	2	4	27	11	41
Tool and die maker	2 to 4	4	251	91	36
Welder	2 to 5	5	34	19	56
Other	...	6	53	30	57
Total	...	4	1,357	579	43
Motor vehicle and heavy equipment trades					
Agricultural equipment technician	4	3.5	30	12	40
Air-cooled and marine engine mechanic (small engine)	2 to 3	5	37	15	41
Automotive service technician	2 to 4	5	1,692	669	40
Heavy duty equipment mechanic technician	4	4	58	38	66
Mobile crane operator	1 to 3	6	44	10	23
Motor vehicle body repairer	2 to 3	5	299	157	53
Motor vehicle steering suspension and brakes mechanics	1 to 2	4	96	60	63
Motor vehicle transmission mechanic	2	6	31	15	48
Motorcycle repair mechanic	2	5.5	36	18	50
Small equipment mechanic	2	5	48	25	52
Transport trailer technician	2	4	29	17	59
Truck and transport mechanic	2	5	132	57	43
Other	...	4.5	62	40	65
Total	...	5	2,594	1,133	44
Other trades					
Arborist (tree cutter)	3	6	37	19	51
Horticulture	2	5	26	10	38
Landscape gardener	2	5	140	94	67
Pool and spa installation and service technician	2	5.5	39	24	62
Other	...	5	72	30	42
Total	...	5	314	177	56

... not applicable

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

1. Discontinuers include Stayouts (not coming back) and Stopouts (coming back).

Note: The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.8.1

Distribution of discontinuers¹ by their characteristics, by age group and main trade, Ontario, 1993/2003

	Characteristics ¹							
	Total discontinuers	Completers	Non-completers	One final interruption ²	One temporary interruption ²	Multiple interruptions ²	Years taken to discontinue of a trade beyond expected duration of completion	
							1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage	percentage	percentage
Total population	4,003	8	92	85	11	4	50	50
Age group								
15 to 19 years	406	12	88	79	15	6	50	50
20 to 24 years	1,488	9	91	83	13	5	50	50
25 to 29 years	911	7	93	85	10	4	51	49
30 to 39 years	890	6	94	90	7	3	48	52
40 years and over	307	x	x	95	x	x	48	52
1993 main trades								
Building construction trades								
Bricklayer	62	x	x	85	x	x	18	82
Building service technician	101	x	x	95	x	x	51	49
Carpenter	333	x	x	92	x	x	30	70
Cement finisher	61	x	x	93	x	x	x	95
Drywall mechanic	32	0	100	94	x	x	0	100
Floorcovering installer	59	x	x	93	x	x	49	51
Lather-interior systems mechanic	29	x	x	x	x	x	x	x
Native residential construction worker	79	16	84	90	x	x	24	76
Plasterer	43	x	x	93	x	x	x	81
Roofer	28	x	x	x	x	x	x	x
Tile setter	30	x	x	x	x	x	x	x
Woodworker	52	x	x	94	x	x	58	42
Other	54	x	x	89	x	x	54	46
Total	965	4	96	92	5	2	34	66
Electrical, electronics and related trades								
Construction electrician	225	11	89	79	15	7	64	36
Industrial electrician	46	33	67	52	x	x	89	x
Powerline technician	15	x	x	x	x	x	x	x
Other	25	x	x	x	x	x	x	x
Total	311	14	86	73	19	8	68	32
Food and service trades								
Baker	35	x	x	91	x	x	34	66
Cook	264	x	x	93	x	x	42	58
Hairstylist	290	4	x	94	x	x	32	68
Meat cutter	54	x	x	94	x	x	78	22
Other	17	x	x	x	x	x	x	x
Total	660	4	96	93	x	x	40	60
Industrial and mechanical trades								
Boilermaker	9	x	x	x	x	x	x	x
Industrial mechanic-millwright	81	14	86	83	x	x	65	35
Industrial plant operator	11	x	x	x	x	x	x	x
Refrigeration and air conditioning mechanic	59	x	x	81	x	x	58	42
Other	18	x	x	x	x	x	x	x
Total	178	11	89	82	x	x	59	41

Table A.8.1

Distribution of discontinuers¹ by their characteristics, by age group and main trade, Ontario, 1993/2003 (concluded)

	Characteristics ¹							
	Total discontinuers	Com- pleters	Non- completers	One final inter- ruption ²	One temporary inter- ruption ²	Multiple inter- ruptions ²	Years taken to discontinue of a trade beyond expected duration of completion	
							1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage	percentage	percentage
Metal fabricating trades								
Ironworker	8	x	x	x	x	x	x	x
Machinist	97	19	81	76	x	x	81	19
Moulder and engraver	78	x	x	83	x	x	83	17
Plumber	128	12	88	83	x	x	55	45
Sheet metal worker	93	x	x	85	x	x	62	38
Steamfitter - pipefitter	24	x	x	x	x	x	x	x
Steel and plate worker	11	x	x	x	x	x	x	x
Tool and die maker	91	15	85	79	x	x	82	18
Welder	19	x	x	x	x	x	x	x
Other	30	x	x	x	x	x	x	x
Total	579	12	88	81	13	6	67	33
Motor vehicle and heavy equipment trades								
Agricultural equipment technician	12	x	x	x	x	x	x	x
Air-cooled and marine engine mechanic (small engine)	15	x	x	x	x	x	x	x
Automotive service technician	669	8	92	82	13	5	67	33
Heavy duty equipment mechanic technician	38	x	x	76	x	x	79	x
Mobile crane operator	10	x	x	x	x	x	x	x
Motor vehicle body repairer	157	8	92	76	15	9	47	53
Motor vehicle steering suspension and brakes mechanics	60	x	x	75	x	x	32	68
Motor vehicle transmission mechanic	15	x	x	x	x	x	x	x
Motorcycle repair mechanic	18	x	x	x	x	x	x	x
Small equipment mechanic	25	x	x	x	x	x	x	x
Transport trailer technician	17	x	x	x	x	x	x	x
Truck and transport mechanic	57	x	x	77	19	x	x	84
Other	40	x	x	73	x	x	40	60
Total	1,133	10	90	80	14	6	56	44
Other trades								
Arborist (tree cutter)	19	x	x	x	x	x	x	x
Horticulture	10	x	x	x	x	x	x	x
Landscape gardener	94	x	x	89	x	x	31	69
Pool and spa installation and service technician	24	x	x	x	x	x	x	x
Other	30	x	x	x	x	x	x	x
Total	177	x	x	92	x	x	32	68

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Dropouts include Stayouts (not coming back) and Stopouts (coming back). Dropouts can also be completers or continuers.

2. Interruptions do not include time away after completing and before starting a new trade.

Note: The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.8.2

Distribution of 1993 new apprentices and discontinuers¹, by duration of program, Ontario, 1993/2003

Program duration from institutions	Total 1993 registered	Total discontinuers
	number	percentage
Total population	9,023	44
1 year	65	55
2 years	2,628	44
3 years	1,903	55
4 years	4,412	40
5 years	15	x
6 years or more	..	..

.. not available for a specific reference period

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Discontinuers include Stayouts (not coming back) and Stopouts (coming back).

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.9

Distribution of 1993 new apprentices and 2003 continuers, by age group and main trade, Ontario

	Total 1993 registered	2003 continuers
	number	percentage
Total population	9,023	12
Age group		
15 to 19 years	1,008	11
20 to 24 years	3,487	11
25 to 29 years	1,994	12
30 to 39 years	1,910	12
40 years and over	622	13
1993 main trades		
Building construction trades		
Bricklayer	75	16
Building service technician	316	11
Carpenter	509	11
Cement finisher	87	29
Drywall mechanic	74	45
Floorcovering installer	70	x
Insulator heat and frost	25	x
Lather-interior systems mechanic	33	x
Native residential construction worker	120	22
Plasterer	45	x
Roofer	41	x
Tile setter	39	x
Woodworker	84	26
Other	69	x
Total	1,587	15
Electrical, electronics and related trades		
Construction electrician	644	8
Industrial electrician	103	13
Powerline technician	37	x
Other	51	x
Total	835	9

Table A.9

Distribution of 1993 new apprentices and 2003 continuers, by age group and main trade, Ontario (concluded)

	Total 1993 registered	2003 continuers
	number	percentage
Food and service trades		
Baker	47	x
Cook	482	16
Hairstylist	1,084	6
Meat cutter	62	x
Other	39	x
Total	1,714	9
Industrial and mechanical trades		
Boilermaker	31	x
Industrial mechanic-millwright	302	10
Industrial plant operator	61	20
Refrigeration and air conditioning mechanic	176	7
Other	52	x
Total	622	10
Metal fabricating trades		
Ironworker	31	x
Machinist	213	14
Moulder and engraver	161	7
Plumber	322	10
Sheet metal worker	210	9
Steamfitter - pipefitter	55	x
Steel and plate worker	27	x
Tool and die maker	251	8
Welder	34	x
Other	53	x
Total	1,357	10
Motor vehicle and heavy equipment trades		
Agricultural equipment technician	30	x
Air-cooled and marine engine mechanic (small engine)	37	x
Automotive service technician	1,692	12
Heavy duty equipment mechanic technician	58	x
Mobile crane operator	44	x
Motor vehicle body repairer	299	21
Motor vehicle steering suspension and brakes mechanics	96	11
Motor vehicle transmission mechanic	31	39
Motorcycle repair mechanic	36	x
Small equipment mechanic	48	25
Transport trailer technician	29	x
Truck and transport mechanic	132	12
Other	62	x
Total	2,594	14
Other trades		
Arborist (tree cutter)	37	x
Horticulture	26	x
Landscape gardener	140	21
Pool and spa installation and service technician	39	x
Other	72	x
Total	314	16

x suppressed to meet the confidentiality requirements of the *Statistics Act***Note:** The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.9.1

Distribution of 2003 continuers by their characteristics, by age group and main trade, Ontario

	Characteristics				
	2003 continuers	Without a previous completion	Same trade	Without a previous interruption ¹	Pure continuers ²
	number	percentage	percentage	percentage	percentage
Total population	1,067	91	80	84	77
Age group					
15 to 19 years	115	90	77	77	71
20 to 24 years	399	89	76	80	71
25 to 29 years	232	91	78	82	75
30 to 39 years	238	94	87	90	86
40 years and over	83	96	92	95	92
1993 main trades					
Building construction trades					
Bricklayer	12	x	x	x	x
Building service technician	35	94	94	97	91
Carpenter	56	98	80	77	77
Cement finisher	25	x	x	x	x
Drywall mechanic	33	100	97	97	97
Insulator heat and frost	6	x	x	x	x
Native residential construction worker	26	x	x	x	x
Woodworker	22	x	x	x	x
Other	8	x	x	x	x
Total	238	96	87	87	84
Electrical, electronics and related trades					
Construction electrician	49	98	86	73	78
Industrial electrician	13	x	x	x	x
Other	8	x	x	x	x
Total	74	99	82	69	74
Food and service trades					
Cook	78	99	94	90	88
Hairstylist	61	98	97	93	92
Other	7	x	x	x	x
Total	151	99	93	90	89
Industrial and mechanical trades					
Industrial mechanic-millwright	31	68	65	90	65
Industrial plant operator	12	x	x	x	x
Refrigeration and air conditioning mechanic	13	x	x	x	x
Other	7	x	x	x	x
Total	63	76	71	89	68
Metal fabricating trades					
Machinist	29	x	x	x	x
Moulder and engraver	12	x	x	x	x
Plumber	31	81	71	84	68
Sheet metal worker	19	x	x	x	x
Steamfitter - pipefitter	9	x	x	x	x
Tool and die maker	19	x	x	x	x
Other	8	x	x	x	x
Total	134	87	73	83	73

Table A.9.1

Distribution of 2003 continuers by their characteristics, by age group and main trade, Ontario (concluded)

	Characteristics				
	2003 continuers	Without a previous completion	Same trade	Without a previous interruption ¹	Pure continuers ²
	number	percentage	percentage	percentage	percentage
Motor vehicle and heavy equipment trades					
Air-cooled and marine engine mechanic (small engine)	6	x	x	x	x
Automotive service technician	203	88	73	78	68
Heavy duty equipment mechanic technician	7	x	x	x	x
Mobile crane operator	7	x	x	x	x
Motor vehicle body repairer	64	97	81	83	80
Motor vehicle steering suspension and brakes mechanics	11	x	x	x	x
Motor vehicle transmission mechanic	12	x	x	x	x
Small equipment mechanic	12	x	x	x	x
Truck and transport mechanic	16	x	x	x	x
Other	10	x	x	x	x
Total	356	89	76	80	72
Other trades					
Horticulture	6	x	x	x	x
Landscape gardener	29	x	x	x	x
Pool and spa installation and service technician	6	x	x	x	x
Other	6	x	x	x	x
Total	51	82	71	86	69

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Interruptions do not include time away after completing and before starting a new trade.

2. Pure continuers never interrupted nor completed a program.

Source: Statistics Canada. Registered Apprenticeship Information System, 2004.

Table A.10

Distribution of certified apprentices by duration for certification, by age group and main trade, Ontario, 1993/2003

	Total certified apprentices				
	Certified apprentices	1 to 3 years	4 years	5 or 6 years	7 or more years
	number	percentage	percentage	percentage	percentage
Total population	4,520	32	24	31	13
Age group					
15 to 19 years	572	16	27	42	15
20 to 24 years	1,855	28	25	33	14
25 to 29 years	975	34	22	31	13
30 to 39 years	870	41	22	26	10
40 years and over	247	60	17	14	10
1993 main trades					
Building construction trades					
Bricklayer	9	x	x	x	x
Building service technician	185	71	16	8	5
Carpenter	140	36	38	19	7
Drywall mechanic	10	100	0	0	0
Floorcovering installer	10	x	x	x	60
Insulator heat and frost	19	x	42	x	x
Native residential construction worker	39	72	3	0	26
Roofer	12	50	x	x	x
Woodworker	12	x	x	x	x
Other	11	x	x	x	x
Total	462	52	22	15	12
Electrical, electronics and related trades					
Construction electrician	409	7	16	48	29
Industrial electrician	64	x	x	41	30
Powerline technician	21	33	x	33	x
Other	24	38	x	38	x
Total	518	9	18	46	27
Food and service trades					
Baker	13	46	x	x	x
Cook	157	55	26	15	4
Hairstylist	749	84	10	5	1
Meat cutter	8	x	x	x	x
Other	17	82	x	x	x
Total	944	78	13	7	2
Industrial and mechanical trades					
Boilermaker	23	x	x	39	x
Industrial mechanic-millwright	213	17	33	36	14
Industrial plant operator	40	25	65	x	x
Refrigeration and air conditioning mechanic	117	15	16	56	13
Other	29	41	x	28	x
Total	422	19	29	39	14

Table A.10

Distribution of certified apprentices by duration for certification, by age group and main trade, Ontario, 1993/2003 (concluded)

	Total certified apprentices				
	Certified apprentices	1 to 3 years	4 years	5 or 6 years	7 or more years
	number	percentage	percentage	percentage	percentage
Metal fabricating trades					
Ironworker	22	x	36	45	x
Machinist	109	15	34	37	15
Moulder and engraver	80	28	25	36	11
Plumber	188	9	28	44	19
Sheet metal worker	112	7	24	51	18
Steamfitter - pipefitter	31	x	x	45	26
Steel and plate worker	17	41	x	x	x
Tool and die maker	159	15	35	40	9
Welder	12	x	67	x	x
Other	20	50	x	30	x
Total	750	15	29	41	15
Motor vehicle and heavy equipment trades					
Agricultural equipment technician	22	x	27	45	x
Air-cooled and marine engine mechanic (small engine)	17	65	x	x	x
Automotive service technician	945	13	32	42	13
Heavy duty equipment mechanic technician	19	x	x	53	x
Mobile crane operator	29	x	38	24	x
Motor vehicle body repairer	103	10	25	51	14
Motor vehicle steering suspension and brakes mechanics	40	28	33	23	18
Motor vehicle transmission mechanic	10	x	x	60	x
Motorcycle repair mechanic	15	x	47	x	x
Small equipment mechanic	14	x	x	x	x
Transport trailer technician	13	46	38	x	x
Truck and transport mechanic	71	13	14	39	34
Other	21	29	24	24	24
Total	1,319	15	30	40	15
Other trades					
Arborist (tree cutter)	17	65	x	x	x
Horticulture	12	83	x	x	x
Landscape gardener	26	77	x	x	x
Pool and spa installation and service technician	10	x	x	x	x
Other	40	18	x	65	x
Total	105	49	12	32	7

x suppressed to meet the confidentiality requirements of the *Statistics Act***Note:** The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Appendix: Provincial tables

Alberta

Table A.11

Distribution of 1993 new apprentices by sex and main trade, Alberta, 1993

1993 main trades	Total	Male	Female
	number	percentage	
Total population	5,485	87	13
Building construction trades	806	97	3
Electrical, electronics and related trades	711	98	2
Food and service trades	987	37	63
Industrial and mechanical trades	503	98	2
Metal fabricating trades	1,221	99	1
Motor vehicle and heavy equipment trades	1,159	98	2
Other trades	98	73	27

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.11.1

Distribution of 1993 new apprentices by age group and main trade, Alberta, 1993

	Total	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 years and over
	number	percentage	percentage	percentage	percentage	percentage
Total 1993 registered apprentices	5,485	11	35	21	26	6
Building construction trades						
Cabinetmaker	89	x	34	25	29	x
Carpenter	416	x	38	22	24	x
Floorcovering installer	31	x	55	x	x	x
Insulator heat and frost	95	x	26	21	27	x
Painters and decorator	66	x	26	26	33	x
Roofer	48	x	42	x	27	x
Other	61	x	43	31	20	x
Total	806	11	36	23	25	5
Electrical, electronics and related trades						
Appliance service technician-serviceman	34	x	x	x	47	x
Construction electrician	564	12	36	22	23	5
Electrician (communications)	36	x	x	x	44	x
Electronics technician consumer products	25	x	x	x	x	x
Powerline technician	26	x	x	x	x	x
Other	26	x	x	x	x	x
Total	711	10	35	22	26	6
Food and service trades						
Baker	68	x	31	26	32	x
Cook	326	9	46	18	18	7
Hairstylist	577	20	44	15	15	6
Other	16	x	x	x	x	x
Total	987	15	43	17	18	6
Industrial and related mechanical trades						
Boilermaker	28	x	x	x	x	x
Industrial instrument mechanic	198	x	x	26	46	14
Industrial mechanic-millwright	182	x	19	25	49	x
Refrigeration and air conditioning mechanic	80	x	19	18	50	x
Other	15	x	x	x	x	x
Total	503	2	17	24	47	10
Metal fabricating trades						
Gaslifter	40	x	x	x	58	x
Ironworker	32	x	41	x	x	x
Machinist	82	x	29	26	34	x
Plumber	272	x	37	27	25	x
Sheet metal worker	128	x	42	24	23	x
Steamfitter - pipefitter	147	x	27	24	35	x
Welder	475	14	34	23	24	5
Other	45	x	24	27	36	x
Total	1,221	9	33	24	28	5
Motor vehicle and heavy equipment trades						
Agricultural equipment technician	33	x	45	x	x	x
Automotive service technician	422	15	42	20	20	3
Crane and hoist operator	81	x	x	15	49	20
Heavy duty equipment mechanic technician	309	14	29	20	29	7
Motor vehicle body repairer	119	19	50	16	x	x
Partsperson (industrial engine and equipment)	127	x	40	21	20	x
Recreational vehicle mechanic	35	x	x	x	37	x
Other	33	x	33	x	x	x
Total	1,159	14	37	19	24	6
Other trades						
Landscape gardener	79	x	39	27	20	x
Other	19	x	x	x	x	x
Total	98	x	42	26	18	x

x suppressed to meet the confidentiality requirements of the Statistics Act

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.12

Distribution of 1993 new apprentices and completers, by age group and main trade, Alberta, 1993/2003

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total completers	
	years	years	number	number	percentage
Total population	...	5	5,485	3,228	59
Age group					
15 to 19 years	...	5	586	405	69
20 to 24 years	...	5	1,921	1,191	62
25 to 29 years	...	5	1,170	665	57
30 to 39 years	...	4	1,439	788	55
40 years and over	...	4	328	159	48
1993 main trades					
Building construction trades					
Cabinetmaker	2 to 4	5	89	42	47
Carpenter	4	5	416	168	40
Floorcovering installer	2	3	31	17	55
Insulator installer heat and frost	4	6	95	37	39
Painters and decorator	3	5	66	28	42
Roofer	3	4	48	21	44
Other	...	4	61	29	48
Total	...	5	806	342	42
Electrical, electronics and related trades					
Appliance service technician-serviceman	3	4	34	19	56
Construction electrician	4	5	564	342	61
Electrician (communications)	4	4	36	17	47
Electronics technician consumer products	4	6	25	12	48
Powerline technician	4	5	26	15	58
Other	...	3	26	15	58
Total	...	5	711	420	59
Food and service trades					
Baker	3	4	68	39	57
Cook	3	3	326	159	49
Hairstyling	2	2	577	441	76
Other	...	5	16	7	44
Total	...	3	987	646	65
Industrial and mechanical trades					
Boilermaker	4	5	28	19	68
Industrial instrument mechanic	4	4	198	113	57
Industrial mechanic-millwright	4	5	182	129	71
Refrigeration and air conditioning mechanic	4	5	80	56	70
Other	...	5	15	13	87
Total	...	5	503	330	66
Metal fabricating trades					
Gasfitter	3	3	40	34	85
Ironworker	3	5	32	12	38
Machinist	4	5	82	46	56
Plumber	4	5	272	157	58
Sheet metal worker	4	7	128	53	41
Steamfitter - pipefitter	4	5	147	70	48
Welder	3	4	475	338	71
Other	...	4	45	25	56
Total	...	5	1,221	735	60

Table A.12

Distribution of 1993 new apprentices and completers, by age group and main trade, Alberta, 1993/2003 (concluded)

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total completers	
	years	years	number	number	percentage
Motor vehicle and heavy equipment trades					
Agricultural equipment technician	2	3	33	26	79
Automotive service technician	4	5	422	248	59
Crane and hoist operator	1 to 3	3	81	41	51
Heavy duty equipment mechanic technician	4	5	309	221	72
Motor vehicle body repairer	3	5	119	64	54
Partsperson (industrial engine and equipment)	3	4	127	79	60
Recreation vehicle mechanic	2	3	35	21	62
Other	...	4	33	22	67
Total	...	5	1,159	722	62
Other trades					
Landscape gardener	4	5	79	29	37
Other	...	...	19	x	x
Total	...	5	98	x	x

... not applicable

x suppressed to meet the confidentiality requirements of the *Statistics Act***Note:** The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.12.1

Distribution of completers by characteristics of completion, by age group and main trade, Alberta, 1993/2003

	Characteristics of completion					
	Total completers	Left after one completion with no interruption	Others	Completed same trade	Years taken to complete a trade beyond expected duration	
					1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage
Total population	3,228	89	11	95	66	34
Age group						
15 to 19 years	405	88	12	89	54	46
20 to 24 years	1,191	87	13	95	65	35
25 to 29 years	665	90	10	96	68	32
30 to 39 years	788	90	10	98	72	28
40 years and over	159	93	7	x	72	28
1993 main trades						
Building construction trades						
Cabinet maker	42	x	x	x	60	40
Carpenter	168	x	x	95	55	45
Floorcovering installer	17	x	x	x	x	x
Insulator installer heat and frost	37	x	x	x	43	57
Painters and decorator	28	x	x	x	x	x
Roofer	21	x	x	x	x	x
Other	29	x	x	x	x	x
Total	342	94	6	95	57	43
Electrical, electronics and related trades						
Appliance service technician-serviceman	19	x	x	x	x	x
Construction electrician	342	79	21	96	52	48
Electrician (communications)	17	x	x	x	x	x
Electronics technician consumer products	12	x	x	x	x	x
Powerline technician	15	x	x	x	x	x
Other	15	x	x	x	x	x
Total	420	81	19	96	55	45
Food and service trades						
Baker	39	x	x	100	79	21
Cook	159	92	8	96	77	23
Hairstyling	441	x	x	100	89	11
Other	7	x	x	x	x	x
Total	646	97	3	99	85	15
Industrial and mechanical trades						
Boilermaker	19	x	x	x	x	x
Industrial instrument mechanic	113	81	19	x	65	35
Industrial mechanic-millwright	129	87	13	x	67	33
Refrigeration and air conditioning mechanic	56	x	x	x	57	43
Other	13	x	x	x	x	x
Total	330	87	13	97	65	35

Table A.12.1

Distribution of completers by characteristics of completion, by age group and main trade, Alberta, 1993/2003 (concluded)

	Characteristics of completion					
	Total completers	Left after one completion with no interruption	Others	Completed same trade	Years taken to complete a trade beyond expected duration	
					1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage
Metal fabricating trades						
Gasfitter	34	x	x	x	x	x
Ironworker	12	x	x	x	x	x
Machinist	46	x	x	100	63	37
Plumber	157	82	18	90	51	49
Sheet metal worker	53	x	x	87	30	70
Steamfitter - pipefitter	70	83	17	90	76	24
Welder	338	89	11	x	67	33
Other	25	x	x	x	x	x
Total	735	86	14	95	62	38
Motor vehicle and heavy equipment trades						
Agricultural equipment technician	26	x	x	x	x	x
Automotive service technician	248	84	16	90	63	37
Crane and hoist operator	41	x	x	x	46	54
Heavy duty equipment mechanic technician	221	92	8	97	72	28
Motor vehicle body repairer	64	x	x	x	44	56
Partsperson (industrial engine and equipment)	79	x	x	92	70	30
Recreational vehicle mechanic	21	x	x	x	x	x
Other	22	x	x	x	x	x
Total	722	88	12	92	64	36
Other trades						
Landscape gardener	29	x	x	x	x	x
Total	x	x	x	x	61	39

x suppressed to meet the confidentiality requirements of the *Statistics Act***Note:** The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.12.2

Distribution of 1993 new apprentices and completers, by trade¹ and duration of program, Alberta, 1993/2003

Program duration from institutions	Total 1993 registered	Total completers
	number	percentage
Total population (1993 trades)	5,485	59
1 year	52	46
Motor vehicle and heavy equipment trades	52	46
Crane and hoist operator	52	46
2 years	691	75
Building construction trades	34	56
Floorcovering installer	31	55
Food and service trades	577	76
Hairstyling	577	76
Motor vehicle and heavy equipment trades	80	70
Agricultural equipment technician	33	79
Recreational vehicle mechanic	35	60
Other	12	..

Table A.12.2

Distribution of 1993 new apprentices and completers, by trade¹ and duration of program, Alberta, 1993/2003 (concluded)

Program duration from institutions	Total 1993 registered	Total completers
	number	percentage
3 years	1,440	59
Building construction trades	160	44
Painters and decorator	66	42
Roofer	48	44
Other	46	46
Electrical, electronics and related trades	34	56
Appliance service technician-serviceman	34	56
Food and service trades	394	50
Baker	68	57
Cook	326	49
Industrial and mechanical trades	7	x
Other	7	x
Metal fabricating trades	570	69
Gasfitter	40	85
Ironworker	32	38
Welder	475	71
Other	23	x
Motor vehicle and heavy equipment trades	275	58
Crane and hoist operator	29	x
Motor vehicle body repairer	119	54
Partsperson (industrial engine and equipment)	127	62
4 years	3,302	56
Building construction trades	612	41
Cabinet maker	86	47
Carpenter	416	40
Insulator heat and frost	95	39
Other	15	x
Electrical, electronics and related trades	677	59
Construction electrician	564	61
Electrician (communications)	36	47
Electronics technician consumer products	25	48
Powerline technician	26	58
Other	26	58
Food and service trades	16	44
Other	16	44
Industrial and mechanical trades	496	66
Boilermaker	28	68
Industrial instrument mechanic	198	57
Industrial mechanic-millwright	182	71
Refrigeration and air conditioning mechanic	80	70
Other	8	x
Metal fabricating trades	651	52
Machinist	82	56
Plumber	272	58
Sheet metal worker	128	41
Steamfitter - pipefitter	147	48
Other	22	x
Motor vehicle and heavy equipment trades	752	64
Automotive service technician	422	59
Heavy duty equipment mechanic technician	309	72
Other	21	x
Other trades	98	34
Landscape gardener	79	37
Other	19	x
5 years or more	..	..

.. not available for a specific reference period

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. A trade can be in more than one program duration, given provincial duration.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.13

Distribution of 1993 new apprentices and discontinuers¹, by age group and main trade, Alberta, 1993/2003

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total discontinuers	
	years	years	number	number	percentage
Total population	...	4	5,485	2,609	48
Age group					
15 to 19 years	...	4	586	254	43
20 to 24 years	...	4	1,921	879	46
25 to 29 years	...	4	1,170	570	49
30 to 39 years	...	4	1,439	706	49
40 years and over	...	4	328	178	54
1993 main trades					
Building construction trades					
Cabinetmaker	2 to 4	3.5	89	52	58
Carpenter	4	4	416	265	64
Floorcovering installer	2	4	31	15	48
Insulator installer heat and frost	4	4	95	65	68
Painters and decorator	3	4.5	66	42	64
Roofer	3	4	48	29	60
Other	...	4	61	33	54
Total	...	4	806	502	62
Electrical, electronics and related trades					
Appliance service technician-serviceman	3	2	34	17	50
Construction electrician	4	4	564	271	48
Electrician (communications)	4	5	36	19	53
Electronics technician consumer products	4	3	25	14	56
Powerline technician	4	5.5	26	14	54
Other	...	4.5	26	14	54
Total	...	4	711	349	49
Food and service trades					
Baker	3	5	68	31	46
Cook	3	4	326	180	55
Hairstyling	2	3	577	152	26
Other	...	5	16	11	69
Total	...	4	987	374	38
Industrial and mechanical trades					
Boilermaker	4	3	28	12	43
Industrial instrument mechanic	4	5	198	99	50
Industrial mechanic-millwright	4	5	182	66	36
Refrigeration and air conditioning mechanic	4	4	80	29	36
Other	...	0	15	0	0
Total	...	5	503	208	41
Metal fabricating trades					
Gasfitter	3	4	40	11	28
Ironworker	3	4	32	21	66
Machinist	4	4	82	40	49
Plumber	4	4	272	135	50
Sheet metal worker	4	4	128	85	66
Steamfitter - pipefitter	4	4	147	91	62
Welder	3	4	475	170	36
Other	...	4	45	26	58
Total	...	4	1,221	579	47

Table A.13

Distribution of 1993 new apprentices and discontinuers¹, by age group and main trade, Alberta, 1993/2003 (concluded)

	Program duration from institutions	Median duration of time spent in program	Total 1993 registered	Total discontinuers	
		years	number	number	percentage
Motor vehicle and heavy equipment					
Agricultural equipment technician	2	3	33	17	52
Automotive service technician	4	3	422	209	50
Crane and hoist operator	1 to 3	5	81	46	57
Heavy duty equipment mechanic technician	4	5	309	106	34
Motor vehicle body repairer	3	4	119	62	52
Partsperson					
(industrial engine and equipment)	3	3	127	55	43
Recreational vehicle mechanic	2	3	35	16	46
Other	...	3	33	16	48
Total	...	4	1,159	527	45
Other trades					
Landscape gardener	4	4	79	54	68
Other	...	4	19	x	x
Total	...	4	98	70	71

... not applicable

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Discontinuers include Stayouts (not coming back) and Stopouts (coming back).

Note: The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.13.1

Distribution of discontinuers¹ by their characteristics, by age group and main trade, Alberta, 1993/2003

	Characteristics ¹						
	Total discontinuers	Com- pleters	Non- completers	One final inter- ruption ²	One temporary inter- ruption ²	Multiple inter- ruptions ²	Years taken to discontinue of a trade beyond expected duration of completion
							1 year or less
	number	percentage	percentage	percentage	percentage	percentage	percentage
Total population	2,609	14	86	78	13	9	65
Age group							
15 to 19 years	254	30	70	64	25	11	67
20 to 24 years	879	18	82	72	18	11	67
25 to 29 years	570	13	87	79	11	10	67
30 to 39 years	706	8	92	86	7	7	62
40 years and over	176	x	x	89	x	x	62
1993 main trades							
Building construction trades							
Cabinetmaker	52	x	x	85	x	x	77
Carpenter	266	8	92	83	8	9	70
Floorcovering installer	15	x	x	x	x	x	x
Insulator heat and frost	65	x	x	74	x	x	83
Painters and decorator	42	x	x	86	x	x	50
Roofer	29	x	x	x	x	x	x
Other	33	x	x	85	x	x	61
Total	502	8	92	83	9	9	69
Electrical, electronics and related trades							
Appliance service technician- serviceman	17	x	x	x	x	x	x
Construction electrician	271	21	79	70	17	13	68
Electrician (communications)	19	x	x	x	x	x	x
Electronics technician consumer products	14	x	x	x	x	x	x
Powerline technician	14	x	x	x	x	x	x
Other	14	x	x	x	x	x	x
Total	349	19	81	72	16	12	67
Food and service trades							
Baker	31	x	x	94	x	x	x
Cook	180	7	93	86	6	8	56
Hairstyling	152	11	89	86	x	x	57
Other	11	x	x	x	x	x	x
Total	374	9	91	86	7	7	54
Industrial and mechanical trades							
Boilermaker	12	x	x	x	x	x	x
Industrial instrument mechanic	99	14	86	83	x	x	54
Industrial mechanic-millwright	66	21	79	73	x	x	71
Refrigeration and air conditioning mechanic	29	x	x	x	x	x	x
Total	208	17	83	77	13	10	64

Table A.13.1

Distribution of discontinuers¹ by their characteristics, by age group and main trade, Alberta, 1993/2003 (concluded)

	Characteristics ¹							
	Total discontinuers	Completers	Non-completers	One final interruption ²	One temporary interruption ²	Multiple interruptions ²	Years taken to discontinue of a trade beyond expected duration of completion	
							1 year or less	2 years or more
	number	percentage	percentage	percentage	percentage	percentage	percentage	percentage
Metal fabricating trades								
Gasfitter	11	x	x	x	x	x	x	x
Ironworker	21	x	x	x	x	x	x	x
Machinist	40	x	x	73	x	x	63	38
Plumber	135	16	84	71	18	11	74	26
Sheet metal worker	85	13	87	75	x	x	81	19
Steamfitter - pipefitter	91	16	84	75	x	x	69	31
Welder	170	19	81	82	x	x	57	43
Other	26	x	x	x	x	x	x	x
Total	579	17	83	75	15	9	67	33
Motor vehicle and heavy equipment trades								
Agricultural equipment technician	17	x	x	x	x	x	x	x
Automotive service technician	209	20	80	67	17	15	77	23
Crane and hoist operator	46	x	x	83	x	x	30	70
Heavy duty equipment mechanic technician	106	17	83	80	x	x	64	36
Motor vehicle body repairer	62	x	x	77	x	x	65	35
Partsperson (industrial engine and equipment)	55	x	x	78	x	x	71	29
Recreational vehicle mechanic	16	x	x	x	x	x	x	x
Other	16	x	x	x	x	x	x	x
Total	527	18	82	73	17	10	67	33
Other trades								
Landscape gardener	54	x	x	93	x	x	70	30
Other	16	x	x	x	x	x	x	x
Total	70	x	x	90	x	x	74	26

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Dropouts include Stayouts (not coming back) and Stopouts (coming back). Dropouts can also be completers or continuers.

2. Interruptions do not include time away after completing and before starting a new trade.

Note: The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.13.2

Distribution of 1993 new apprentices and discontinuers¹, by duration of program, Alberta, 1993/2003

Program duration from institutions	Total 1993 registered	Total discontinuers
	number	percentage
Total population	5,485	48
1 year	52	60
2 years	691	30
3 years	1,440	47
4 years	3,302	51
5 years	..	..
6 years or more	..	..

.. not available for a specific reference period

1. Discontinuers include Stayouts (not coming back) and Stopouts (coming back).

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.14

Distribution of 1993 new apprentices and 2003 continuers, by age group and main trade, Alberta

	Total 1993 registered	2003 continuers
	number	percentage
Total population	5,485	4
Age group		
15 to 19 years	586	4
20 to 24 years	1,921	6
25 to 29 years	1,170	4
30 to 39 years	1,439	4
40 years and over	328	x
1993 main trades		
Building construction trades		
Cabinetmaker	89	x
Carpenter	416	x
Floorcovering installer	31	x
Insulator installer heat and frost	95	x
Painters and decorator	66	x
Roofer	48	x
Other	61	x
Total	806	3
Electrical, electronics and related trades		
Appliance service technician-serviceman	34	x
Construction electrician	564	10
Electrician (communications)	36	x
Electronics technician consumer products	25	x
Powerline technician	26	x
Other	26	x
Total	711	9
Food and service trades		
Baker	68	x
Cook	326	x
Hairstyling	577	x
Other	16	x
Total	987	1
Industrial and mechanical trades		
Boilermaker	28	x
Industrial instrument mechanic and repair	198	x
Industrial mechanic-millwright	182	7
Refrigeration and air conditioning mechanic	80	x
Other	15	x
Total	503	5
Metal fabricating trades		
Gasfitter	40	x
Ironworker	32	x
Machinist	82	x
Plumber	272	8
Sheet metal worker	128	x
Steamfitter - pipefitter	147	x
Welder	475	4
Other	45	x
Total	1,221	6

Table A.14

Distribution of 1993 new apprentices and 2003 continuers, by age group and main trade, Alberta (concluded)

	Total 1993 registered	2003 continuers
	number	percentage
Motor vehicle and heavy equipment trades		
Agricultural equipment technician	33	x
Automotive service technician	422	6
Crane and hoist operator	81	x
Heavy duty equipment mechanic technician	309	x
Motor vehicle body repairer	119	x
Partsperson (industrial engine and equipment)	127	x
Recreational vehicle mechanic	35	x
Other	33	x
Total	1 159	4
Other trades		
Landscape gardener	79	x
Other	19	x
Total	98	x

x suppressed to meet the confidentiality requirements of the *Statistics Act***Note:** The age group total in table may not add up to the total population because of unknown ages.**Source:** Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.14.1

Distribution of 2003 continuers by their characteristics, by age group and main trade, Alberta

	Characteristics				
	2003 continuers	Without a previous completion	Same trade	Without a previous interruption ¹	Pure continuers ²
	number			percentage	
Total population	246	52	25	49	14
Age group					
15 to 19 years	22	x	x	x	x
20 to 24 years	116	49	22	48	10
25 to 29 years	49	61	33	51	22
30 to 39 years	52	54	25	52	x
40 years and over	7	x	x	x	x
1993 main trades					
Building construction trades					
Carpenter	9	x	x	x	x
Total	21	x	x	x	x
Electrical, electronics and related trades					
Construction electrician	56	45	29	63	x
Total	63	46	27	60	19
Food and service trades					
Cook	8	x	x	x	x
Total	12	x	x	x	x
Industrial and mechanical trades					
Industrial instrument mechanic	9	x	x	x	x
Industrial mechanic-millwright	13	x	x	x	x
Total	24	x	x	x	x
Metal fabricating trades					
Machinist	7	x	x	x	x
Plumber	23	x	x	x	x
Sheet metal worker	8	x	x	x	x
Steamfitter - pipefitter	8	x	x	x	x
Welder	21	x	x	x	x
Total	77	58	23	48	x
Motor vehicle and heavy equipment trades					
Automotive service technician	26	x	x	x	x
Heavy duty equipment mechanic technician	8	x	x	x	x
Motor vehicle body repairer	6	x	x	x	x
Total	47	57	32	49	23

x suppressed to meet the confidentiality requirements of the *Statistics Act*

1. Interruptions do not include time away after completing and before starting a new trade.

2. Pure continuers never interrupted nor completed a program.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Table A.15

Distribution of certified apprentices by duration for certification, by age group and main trade, Alberta, 1993/2003

	Total certified apprentices				
	Certified apprentices	1 to 3 years	4 years	5 or 6 years	7 or more years
	number	percentage			
Total population	3,220	28	19	39	13
Age group					
15 to 19 years	403	26	13	41	20
20 to 24 years	1,187	30	17	38	15
25 to 29 years	664	27	22	38	13
30 to 39 years	787	28	23	40	9
40 years and over	159	35	24	30	11
1993 main trades					
Building construction trades					
Cabinetmaker	42	x	19	64	x
Carpenter	168	3	16	58	23
Floorcovering installer	17	59	x	x	x
Insulator installer heat and frost	37	x	x	54	35
Painters and decorator	28	x	36	43	x
Roofer	21	33	38	x	x
Other	29	x	55	31	x
Total	342	8	23	49	20
Electrical, electronics and related trades					
Appliance service technician-serviceman	19	26	47	x	x
Construction electrician	340	4	9	65	22
Electrician (communications)	17	41	x	29	x
Electronics technician consumer products	12	x	x	42	x
Powerline technician	15	x	33	33	x
Other	15	53	x	x	x
Total	418	9	13	58	21
Food and service trades					
Baker	39	38	41	x	x
Cook	159	54	23	16	7
Hairstyling	440	89	5	4	2
Other	7	x	x	x	x
Total	645	77	12	8	4
Industrial and mechanical trades					
Boilermaker	19	x	x	68	x
Industrial Instrument Mechanic	113	33	19	33	16
Industrial mechanic-millwright	128	9	21	57	13
Refrigeration and air conditioning mechanic	56	13	16	57	14
Other	13	x	x	69	x
Total	329	17	19	50	13
Metal fabricating trades					
Gasfitter	34	65	21	x	x
Ironworker	12	x	x	x	x
Machinist	46	2	24	59	15
Plumber	157	x	x	66	22
Sheet metal worker	53	x	x	38	55
Steamfitter - pipefitter	69	16	20	48	16
Welder	338	27	41	25	7
Other	25	x	32	32	x
Total	734	18	27	39	16

Table A.15

Distribution of certified apprentices by duration for certification, by age group and main trade, Alberta, 1993/2003 (concluded)

	Certified apprentices	Total certified apprentices			
		1 to 3 years	4 years	5 or 6 years	7 or more years
	number			percentage	
Motor vehicle and heavy equipment					
Agricultural equipment technician	26	65	x	27	x
Automotive service technician	247	10	17	58	15
Crane and hoist operator	41	63	24	x	x
Heavy duty equipment mechanic technician	220	18	19	50	13
Motor vehicle body repairer	64	16	28	44	13
Partsperson					
(industrial engine and equipment)	78	33	37	23	6
Recreational vehicle mechanic	21	71	x	x	x
Other	22	32	32	x	x
Total	719	23	21	44	13
Other trades					
Landscape gardener	29	x	x	72	x
Total	33	x	x	70	15

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Note: The age group total in table may not add up to the total population because of unknown ages.

Source: Statistics Canada, Registered Apprenticeship Information System, 2004.

Endnotes

1. Prasil, Sandrine, *Registered Apprentices: The Class of 1992, a Decade Later*, catalogue 81-595-MIE, Statistics Canada.
2. Some modifications to the data were required to prepare the linkage, especially in the case of multiple records for a same individual. In some cases, other variables were added to link the data.
3. The exclusion of those apprentices created a slight difference between the number of new registered apprentices in 1993 included in this study and the published numbers.
4. Three provinces share a common information system (New Brunswick, Nova Scotia and Manitoba) but each of the data elements of that system is not necessarily populated the same way.
5. Tables A.5, A.10 and A.15, are on the certified apprentices. For the 1992 cohort, the database included information on the apprentices who left the program and returned to receive a certificate as tradespersons. Those persons were among the discontinuers but not among the completers, they were counted among the certified. In the 1993 cohort database, no information on the certification of those people was included and therefore Tables A.5, A.10 and A.15 include about the same numbers of certified and completers.
6. Actually 6% of the 1993 cohort of apprentices was still registered in 2003. This additional 3% are those who registered in a new program after having completed one or who came back to a program after an interruption.
7. The major trade groups are those that Statistics Canada has been using for data dissemination on apprentices.
8. In New Brunswick, the miscellaneous group «other trades» had too few apprentices to do any calculation.
9. The total proportion who returned is the sum of the columns «one temporary interruption» and «multiple interruptions» in Table A.3.1.
10. In fact, 12% of the apprentices who started an apprenticeship program in 1993 in Ontario were still registered in 2003 if we include those who previously completed another program or interrupted a program during the 11-year period (Table A.9 in the appendix). This proportion is twice that found for New Brunswick.
11. Four percent of the entire 1993 cohort were still registered in 2003, but these were apprentices who had returned to a program after completing or discontinuing a program previously (Tables A.4 in the appendix).
12. The higher rate of return to an apprenticeship program for Alberta in comparison with the rates for Ontario and for New Brunswick may be explained by a more systematic verification of discontinuity in that province.

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Cumulative index

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The **Tourism Statistics Program** provides information on domestic and international tourism. The program covers the Canadian Travel Survey and the International Travel Survey. Together, these surveys shed light on the volume and characteristics of trips and travellers to, from and within Canada.

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